Contents

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Friedrich-Ebert-Stiftung has been present in Southeast Asia for more than 30 years. Its country offices in Bangkok, Jakarta, Manila and Hanoi have been active in implementing national cooperation programmes in partnership with parliaments, civil society groups and non-governmental organizations, academic institutions and 'think-tanks', government departments, political parties, women's groups, trade unions, business associations and the media.

In 1995, the Singapore office was transformed into an Office for Regional Cooperation in Southeast Asia. Its role is to support, in close cooperation with the country offices, ASEAN cooperation and integration, Asia-Europe dialogue and partnership, and country programmes in Cambodia and other ASEAN member states where there are no Friedrich-Ebert-Stiftung offices.

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Dialogue + Cooperation is a reflection of the work of the Office for Regional Cooperation in Southeast Asia of Friedrich-Ebert-Stiftung in Singapore: it deals with ASEAN cooperation as well as the Asia-Europe dialogue.

- *Dialogue + Cooperation* will tell you about our activities in Southeast Asia by publishing important contributions to our conferences and papers from our own work.
- *Dialogue + Cooperation* will contribute to the dialogue between Asia and Europe by systematically covering specific up-to-date topics which are of concern for the two regions.
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Editorial: Dialogue + Cooperation 2/2005

Dear Reader

2005 marks the thirtieth anniversary of the seizure of power by the Khmer Rouge in Cambodia. After a long political struggle for an international tribunal, a court will finally be established under the auspices of the United Nations. It will look into the atrocities, crimes and genocide committed during the reign of the Khmer Rouge (1975-1979) and eventually sentence those found to be responsible for them. To illuminate this dark chapter of Cambodia's history, Friedrich-Ebert-Stiftung organized an exhibition and several conferences in Germany in April 2005. This issue of *Dialogue + Cooperation* presents some selected contributions from and around these conferences.

In the opening speech of the International Symposium 'From Dictatorship to Democratic Transformation – Coming to Terms with the Past: Cambodia, Germany, Peru, South Africa and Timor Leste', held on 15 April 2005 in Berlin, Germany, HRH Prince Norodom Sirivudh lays down the legal framework of the Khmer Rouge Tribunal. In a background paper, Raimund Weiß provides the historical context of the Tribunal. Referring to the German and South African experiences, Roland Czada draws our attention to the fact that justice alone is not sufficient to establish peace and reconcile a society after a traumatic period such as that experienced by the Cambodian people.

In the last 30 years, the electronics industry has been a major pillar of economic development in Southeast Asia. Globalization, China's entry into the world market and the bursting of the 'dot-com' bubble in 2000/2001 have triggered job cuts on a large scale as well as restructuring of companies and relocation of manufacturing. With impacts on employment, wages and working conditions, these processes affect industrialized and developing regions of the world and in particular Southeast Asia. Against this background, the Friedrich-Ebert-Stiftung organized a workshop to look into 'Labour Standards and Union Organizing in the IT Industry in East and Southeast Asia' from a trade union perspective from 30 May to 3 June 2005 in Penang, Malaysia. Whereas Boy Lüthje draws a general picture of the current IT industry, Robert Steiert focuses on trade unions in the electronics industry and the challenges they face to cope with a rapidly changing production sphere. Rajah Rasiah comprehensively evaluates the potential impact of China on the Southeast Asian IT industry and labour markets. Sanjiv Pandita and Apo Leong then highlight the production and working conditions in China's booming electronics industry.

All papers and statements reflect the opinions of the individual authors. The Singapore Office of Friedrich-Ebert-Stiftung would like to express its sincere appreciation to all contributors to this edition.

The Editor
Friedrich-Ebert-Stiftung
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From Dictatorship to Reconciliation – the Perspectives for the Khmer Rouge Tribunal in Cambodia

Speech of HRH Samdech Norodom Sirivudh on 15 April 2005, Berlin, Germany

First of all, I wish to extend my most sincere appreciation to the Friedrich-Ebert-Stiftung for kindly extending the invitation to me to share my views on the topic of today's international symposium on 'From Dictatorship to Democratic Transformation – Coming to Terms with the Past: Cambodia, Germany, Peru, South Africa and Timor Leste'.

After the downfall of the genocidal regime of Pol Pot on 7 January 1997, a new government, called the People's Republic of Kampuchea (PRK) was set up with assistance from Vietnam and Eastern European Socialist countries. It was unable militarily to defeat the rump Khmer Rouge, which sought shelter along the Thai-Cambodian border, together with two anti-government factions: the royalist FUCINPEC, founded by Prince Sihanouk; and the republican Khmer People's National Liberation Front (KPNLF) led by former Prime Minister Son Sann.

The three factions under considerable external pressure established the so-called Coalition Government of Democratic Kampuchea (CGDK), which received aid from China, Thailand and the West. It was permitted to occupy the Cambodian seat at the United Nations, despite lacking the national attributes normally required for such international recognition. Meanwhile, the PRK, supported by Vietnam and the Soviet Union, was isolated by the West, particularly the United States, and by the

Association of Southeast Asian Nations (ASEAN).

The Khmer Rouge Tribunal not only educates about the past, but perhaps more importantly, can create awareness for the future, helping to build a determination among human beings that, working together, we can prevent the crime of genocide from happening. We are firmly resolved to do whatever is needed to provide an open trial of those responsible for genocidal crimes in the country during the CGDK period between 17 April 1975 and 6 January 1979. The end of the Khmer Rouge period was followed by a civil war. That war finally ended in 1998, when the Khmer Rouge political and military structures were completely eliminated.

In 1997, the Royal Government of Cambodia asked the United Nations to assist in establishing a trial to prosecute the senior leaders of the Khmer Rouge. In 1998, the government and the UN worked together towards implementing a new type of mixed national and international tribunal. In 1999, the government appointed a task force to prepare for the trials and negotiate with the UN. The negotiations with the UN were lengthy, complicated and controversial and it is true to say that there were some misunderstandings and differences of opinion.

In 2001, the Cambodian National Assembly passed a law to create a court to

try serious crimes committed during the 1975-1979 Khmer Rouge regime. This court was called the Extraordinary Chambers in the Courts of Cambodia for the Prosecution of Crimes Committed during the Period of Democratic Kampuchea. The law was amended in October 2004.

In June 2003, the Royal Government of Cambodia and the UN signed an Agreement Concerning the Prosecution under Cambodian Law of Crimes Committed during the Period of Democratic Kampuchea to provide details of international participation. The purpose of the Agreement is to regulate the cooperation between the United Nations and the Royal Government of Cambodia in bringing to trial senior leaders of Democratic Kampuchea and those who were most responsible for the crimes and serious violations of Cambodian penal law, international humanitarian law and custom, and international conventions recognized by Cambodia, that were committed during the period from 17 April 1975 to 6 January 1979. The Agreement provides, *inter alia*, the legal basis and the principles and modalities for such cooperation.

In holding this trial, we will carefully balance, on the one hand, the need for providing justice to our people who were victims of this genocidal regime, and to finally put behind us the dark chapter of our terrible history with, on the other hand, the paramount need for continued national reconciliation and the safeguard of the hard-gained peace as well as national independence and sovereignty, which we value the most.

General Assembly of the United Nations, in its resolution 57/228 of 18 December 2002, recalled that the serious violations of Cambodian and international humanitarian law during the period of Democratic Kampuchea from 1975 to 1979 continue to be matters of vitally important concern to the international community as a whole.

The present Agreement recognizes that the Extraordinary Chambers have subject matter jurisdiction consistent with that set forth in the Law on the Establishment of the Extraordinary Chambers in the Courts of Cambodia for the Prosecution of Crimes Committed During the Period of Democratic Kampuchea as adopted and amended by the Cambodian Legislature under the Constitution of Cambodia. The present Agreement further recognizes that the Extraordinary Chambers have personal jurisdiction over senior leaders of Democratic Kampuchea and those who were most responsible for the crimes referred to in Article 1 of the Agreement.

On 28 March this year, a pledging Conference for the United Nations Assistance to the Khmer Rouge Trials (UNAKRT) was held in the United Nations Secretariat in New York. Out of the total costs of the Extraordinary Chambers (US$61.5 million of which US$56.3 million in the budget plus the US$5.2 million extra-budgetary expenses), US$38.5 million was pledged by a number of interested countries including Japan (US$21.6 million), France (US$4.8 million), United Kingdom (US$2.8 million), Australia (US$2.35 million), Netherlands (US$1.98 million), Canada (US$1.61 million), Germany (US$1 million), Norway (US$1 million), Austria, Sweden, Denmark, Luxembourg, Belgium and the Republic of Korea. For its part, Cambodia also pledged US$6.7 million consisting of US$1.5 million in cash, and an estimated US$5.2 million in kind expenses which lie outside the budget itself. Though there is still more money needed, we are confident that the formula we have agreed to establish the Chambers will not only meet our country's needs for justice in this particular case, but will also assist the wider process of legal and judicial

reform by providing a model court meeting international standards. Furthermore, we are hopeful that the Cambodian Extraordinary Chambers may also serve as a model for other countries in their cause of searching for justice.

The war in Cambodia is completely over, but the peace of mind of many Cambodian people has not yet been achieved. The legacy of the Khmer Rouge is still haunting them. Peace of mind requires more than the absence of the sound of ammunition and guns. Cambodian people as well as other justice-loving people require real justice for the crimes of the Khmer Rouge regime. Many Cambodians still have fear in their hearts, because every day they can see the culprits living freely around them as if nothing had happened. With good cooperation and real commitment from the United Nations and the world community we must bring those who committed crimes against humanity and genocide in Cambodia to justice.

Cambodia's Past: A Study on the Delay of the Khmer Rouge Tribunal

Raimund Weiß*

Introduction

This study examines the reasons for the long delay in setting up the Khmer Rouge Tribunal. It is argued that only with such a delay has economic and political stabilization after Cambodia's second civil war (1979-1991) been possible, while the important question of justice for the victims of the Khmer Rouge regime, which was responsible for the deaths of more than one million people during its reign between 17 April 1975 and 7 January 1979, had to be deferred. Had the tribunal been established earlier, the monarchist élites, led by former King Norodom Sihanouk, might have endangered the peace process. Even though the former members of the Communist Party of Kampuchea and today's leading governmental party further consolidated their power after the 2003 parliamentary elections, the establishment of a tribunal was still heavily dependant on the open question of whether the monarchist élites would support it and bring about long-awaited justice for victims to consolidate the peace process in the interest of Cambodia's economic and social recovery.

The Khmer Rouge Tribunal in its Historical Context

The mass-killing, starvation and war that caused the deaths of more than a million people during the totalitarian reign of the Khmer Rouge Regime between 17 April 1975 and 7 January 1979 counts among the worst human crimes in the twentieth century. Today it is a known historical fact that the Khmer Rouge regime was a totalitarian regime comprised of a few members of the Communist Party of Kampuchea who succeeded in holding on to power for almost four years by using loyal military troops and secret police to implement food rationing, torture and executions as central instruments of power. As Nuon Chea, the former head of the Standing Committee of Kampuchea's People Representative Assembly and second highest official of the Khmer Rouge regime, stated in a letter to the Communist Party of Denmark in 1977: 'The leadership must be defended at any price. If we loose members but retain the leadership, we can continue to win victories. As long as the leadership is there, the party will not die. There can be no comparison between losing two or three leading cadres and 200 to 300 members. Otherwise the party has no head and cannot lead the struggle.'[1]

The totalitarian Khmer Rouge regime led by Pol Pot was based on a highly idealized

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1. Nuon Chea, 'Statement of the Communist Party of Kampuchea to the Communist Workers Party of Denmark in Juli 1977', *Searching for the Truth* (Phnom Penh: Documentation Centre of Cambodia, August 2001) (www.dccam.org).

utopian concept of a communist society. It was built from the bottom up after the first Cambodian civil war (1970-1975), which had destroyed the country and gave the basis for the uprising of a communist political movement – a movement that had been without popular support until the war in neighbouring Vietnam spread into Cambodia in 1970. The Vietnam War forced Cambodia's government to choose to ally with the Western Bloc, represented by the US government, South Vietnam and the states of ASEAN (Association of Southeast Asian Nations). King Norodom Sihanouk was removed in March 1970 because he had chosen the Eastern Bloc against the will of his government. However, he did not accept his removal and declared war against his own government, which was then led by defence minister Lon Nol. With the support of the Communist Party of Kampuchea and the governments of China, North Korea and North Vietnam, Norodom Sihanouk tried to regain power. The leadership of Cambodia's Communist Party, namely Pol Pot, Son Sen, Nuon Chea and Ieng Sary, were empowered to lead the military struggle in the name of the monarchy. Ieng Sary was nominated the Special Emissary of the Royal Government in exile to keep the King, in exile in Beijing, informed about the resistance war in Cambodia.[2]

The civil war lasted five years, but against Norodom Sihanouk's expectations, led to the leadership of the Communist Party of Kampuchea taking control on 17 April 1975 and installing a totalitarian regime. While the former King was held under house arrest, the Khmer Rouge regime collectivized the agricultural sector and set up a communist-style society in place of the historical, Buddhist-legitimized Cambodian monarchy. It was believed that Mao Tse Tung's thought, not Buddhism, would lead Cambodia into a new era of prosperity, peace and freedom. As Pol Pot, the leader of the Communist Party of Kampuchea, declared during a state visit to China in September 1977, 'We have studied the experience of world revolution, particularly the works of Comrade Mao Tse Tung and the experience of the Chinese revolution. ... [U]nder the guidance of the works of Comrade Mao Tse Tung, we have found a way appropriate for the realities of Kampuchea. ... For our revolution in Kampuchea, ... the communist party, and the Chinese people have provided us with the most precious thing – the thought of Mao Tse Tung.'[3]

The implementation of Maoist thought took the form of mass deportations of people to the countryside, where they were put into agricultural communes of more than 1,000 people each, while the traditional Buddhist socio-political system was abolished and replaced with a system based on communist doctrine. The farmer class was styled as the ideal class of the new Cambodian society, while those who had lived in the towns engaging in trade, finance and the arts were stigmatized as the exploiting class, who had to be re-educated in agricultural communes. Only once this re-education had taken place could they rise to the revolutionary status of the farmer class. The objective was to create an equal society of farmers, where no exploitation took place and which could develop properly and peacefully without the traditional Buddhist-legitimized hierarchical systems of different

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2. See Norodom Sihanouk, *My War with the CIA* (London: Penguin Books, 1973), pp. 29, 59; Kristina Chhim, *The Revolutionary People's Party of Kampuchea from 1979 to 1989* (Frankfurt: Peter Lang Publishing House, 2000), pp. 54-55; Ros Chantrabot, *La République Khmère* (Paris: L'Harmattan, 1993), pp. 17-26.

3. See 'Excerpt from Pol Pot's Speech to a Press Conference in Peking, 29th September 1977, China, *People's Daily*, 3rd October 1977', in J. Howard De Nike, *Genocide in Cambodia - Documents of the Trial of Pol Pot and Ieng Sary* (University of Pennsylvania, Philadelphia, 2000), p. 415.

social classes, norms and values. It was a 'socio-political experiment',[4] as Pol Pot declared in a later interview. The result was the total destruction of Cambodia's social and economic structures. The expected replacement of the traditional Buddhist-legitimized monarchical socio-political system failed, leading to the mass killing and mass starvation of more than a million Cambodians between April 1975 and January 1979.[5]

The crimes on which the long-awaited Khmer Rouge Tribunal is now expected to focus are the mass deportations, torture, mass executions and the failed economic policy, which was not reversed even when the Khmer Rouge regime became aware of the catastrophic humanitarian situation it was creating for the population during its reign. Proof of the systematic torture and execution carried out by the Khmer Rouge regime can be found at the security prison S-21 in Phnom Penh, where approximately 13,000 people were tortured and afterwards executed in Choeung Ek, a suburb of Cambodia's capital.[6]

But why, up to the present day, have none of the high-ranking members or other members of the Khmer Rouge regime been held accountable for the crimes they committed? Among them – Ieng Sary, the Special Emmissary of the Royal Government in Exile during the first Cambodian civil war and minister for foreign affairs of the Khmer Rouge regime, Nuon Chea, head of the Standing Committee of Kampuchea's People Representative Assembly, Khieu Samphan, member of the Royal Government in Exile during the first Cambodian civil war and state president of the Khmer Rouge regime, Ung Choeun, alias Ta Mok, a military general responsible for mass executions and Khaing Khek Iev, alias Duch, director of security prison S-21 – only the latter two are in prison today, but without any court hearing or judgement of their role in the regime. Their leader, Pol Pot, died in April 1998 without any court hearing or judgement. Other high-ranking members of the regime have also died before being brought to justice, namely Son Sen, the former defence minister, who was killed in 1997 on Pol Pot's orders, and military general Ke Pauk, one of Pol Pot's closest associates responsible for mass executions along with Ta Mok, who died in 2002.[7]

Civil War and Reconciliation after the Fall of the Khmer Rouge Regime

To answer these questions, you have to look into the history of Cambodia's second civil war between 1979 and 1991, after the totalitarian regime had been tackled by a resistance force of former members of the Communist Party of Kampuchea with the support of Vietnam, as well as the political developments after the civil war, which ended with the signing of the Paris Peace Accords in 1991. The political developments in this period explain why no Khmer Rouge Tribunal could be established to bring justice to the victims until 2005.

4. Pol Pot in a live television interview with journalist Nate Thayer in 1998, broadcasted by the television station Arte (produced by Annet Beuchot), 'Genocide in Cambodia', Straßburg, September 2001.
5. See Ben Kiernan, *The Pol Pot Regime* (New Haven: Yale University Press, 1996); Mary Robinson (UN High Commissioner for Human Rights), UN-Report A/53/850; S/1999/231, New York, 16 March 1999 (www.dithpran.org/lecture.htm); Documentation Centre of Cambodia, Phnom Penh, 2005 (www.dccam.org).
6. See David Chandler, *Voices from S-21. Terror and History in Pol Pot's Secret Prison* (Bangkok: Silkworm Books, 1999).
7. See Stephen Heder, *Seven Candidates for Prosecution: Accountability for the Crimes of the Khmer Rouge* (War Crimes Research Office, American University, Washington, 2001).

The first long delay in setting up a Khmer Rouge Tribunal was caused by the second Cambodian civil war, which led to a suppression of the regime's crimes, while polarizing the Cambodian public. The civil war started in the wake of the fall of the Khmer Rouge regime in 1978. It had become obvious that their politics had failed and it was only a matter of time before it fell apart. To avoid this development, the regime tried to mobilize the population to wage a war against Vietnam. With the support of loyal troops led by general Ke Pauk and Ta Mok, the Khmer Rouge regime started offensives along the border with Vietnam, while any opposition to the war was repressed with mass executions and mass deportations, mainly in the border provinces. Members of the Communist Party of Kampuchea defected to neighbouring Vietnam, where the government supported efforts to build up a resistance force against the Khmer Rouge regime. On 7 January 1979, the National Kampuchean Salvation Front, comprised of former low-ranking members of the Communist Party of Kampuchea, overthrew the regime with the support of Vietnamese troops. Members of the Salvation Front are today represented in the leading government party, the Cambodian People Party (CPP), the most well known of whom are Hun Sen, a former low-ranking military commander who is the current prime minister, and Chea Sim, a low-ranking party secretary, who is now president of the Senate, Cambodia's second parliamentary chamber.[8]

The fall of the Khmer Rouge regime did not, however, bring about solidarity in rebuilding the country. The monarchist élites led by former King Norodom Sihanouk and the republican élites led by Son Sann (former members of the Lon Nol government during the first Cambodian civil war) put the question of how to prevent the criminal Khmer Rouge regime, which had escaped with up to 30,000 soldiers in the Cambodian-Thailand border region, from regaining of power behind the question of the independence and sovereignty of Cambodia. In 1979, they started a new war against the National Kampuchean Salvation Front of former members of the Communist Party of Kampuchea with the argument that the latter tolerated colonization of Cambodia by Vietnam's socialist government. This argument was not based on *realpolitik*: in reality there was no other choice than to count on the support of Vietnam to prevent the Khmer Rouge regime from regaining power. The UN was blocked at this time – China supported the Khmer Rouge regime as did its alliance partner North Korea, and even the governments of the United States and ASEAN saw Vietnam's support for the Salvation Front as a hidden form of Soviet Union-led Eastern Bloc hegemonic policy.[9]

But the monarchist and republican élites ignored the *realpolitik* and insisted on an United Nations solution to form a new Cambodian government with the holding of liberal-democratic elections and the establishment of a Western-style liberal-democratic system. With the argument that they were fighting a war for Cambodia's independence and sovereignty, the monarchist and republican élites, led by King Norodom Sihanouk, his son Prince Norodom Ranariddh and Son Sann, even formed a political and military alliance with the Khmer Rouge regime in 1982. The political task of the alliance, which was given the state name of the Khmer Rouge regime – the Government of Democratic Kampuchea – was not to bring about justice for the victims, nor to prevent the Khmer Rouge regime regaining of power, but to

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8. See Kiernan, op. cit., pp. 386-455.
9. See Renate Strassner, *The Cambodia Conflict from 1986 to 1990* (Münster: Lit Publishing House, 1991).

overthrow the Salvation Front, which was seen as a 'Vietnamese marionette'. War campaigns broadcast over radio stations in Thailand proclaimed: 'Will all the Khmer children at home be satisfied with bowing before the Vietnamese deciding the fate of Cambodia? And will all the Khmer children be satisfied to stand with their hands folded looking afar at a Cambodia under the violent, savage, ferocious and genocidal occupation of Vietnamese?'[10]

On the other side, the National Kampuchean Salvation Front formed a new Cambodian party named the Revolutionary People Party of Kampuchea, which was based on the communist doctrines of the Eastern Bloc. The party justified their war against the government in exile with the reasonable argument that there was no alternative but to rely on Vietnam's support and install a socialist-style system to prevent the Khmer Rouge regime regaining power and bring about justice for the victims. In August 1979, a People Tribunal was established in Phnom Penh and the day of the fall of the Khmer Rouge regime was declared Liberation Day (it is commemorated annually to this day). Two former leaders of the regime – Pol Pot and his foreign minister, Ieng Sary – were sentenced to death *in absentia*. The tribunal stated in its judgement that 'The genocidal Pol Pot-Ieng Sary clique denied the existence not only of the Kampuchean nation, but also of our national cultural traditions, and they destroyed family and social structures, the economic system, national culture and education, and the health service. The accused Pol Pot and Ieng Sary even destroyed the national conscience and spirit of the Kampuchean people. They destroyed the conditions for

the existence of the Kampuchean people.'[11]

However, the tribunal was not recognized by a majority of UN member states and the government in exile, led by former King Norodom Sihanouk, delayed bringing about any justice for the victims of the regime until the end of Cambodia's second civil war in October 1991. International public discourse on the new civil war was dominated by the question of independence and sovereignty of Cambodia and not by the question of justice for the victims. Diplomatic interventions to end the war failed because the majority of states represented in the UN General Assembly supported the alliance of the monarchist and republican élites with the Khmer Rouge regime, ignoring the crimes of the latter, while the Cambodian government of the newly formed Revolutionary People Party was supported by the governments of Vietnam, India and the Eastern Bloc.[12]

After the second Cambodian civil war, which officially ended with the signing of the Paris Peace Accords in October 1991, a credible Khmer Rouge Tribunal was further delayed. While the monarchist and republican élites agreed to resolve their power conflicts with the Revolutionary People Party, which was renamed Cambodian People Party, by partaking in UN-supervised parliamentary elections in 1993, the Khmer Rouge regime continued to fight a war of resistance. The war lasted until 1999 and destabilized the fragile government coalition formed after the UN-supervised elections. The political situation was further complicated by the fact, that the monarchist élites, now represented by the King's party FUNCINPEC (Front Uni National pour un Cambodge Indépendent,

10. Khmer Buddhist Association (Son Sann), Buddhism and the Future of Cambodia (Rithisen: Khmer Buddhist Centre, 1986), p. 105; Norodom Sihanouk, Chronicles of War and Hope (Frankfurt: Ullstein Publishing House, 1980).
11. De Nike, op. cit., p. 549; see also David Chandler, *Brother Number One. A Political Biography of Pol Pot* (Colorado: Westview Press, 1999). pp. 157-170; Chhim, op. cit., pp. 95-113.
12. For a detailed analysis of the diplomatic initiatives see Strassner, op. cit.

Neutre, Pacifique et Cooperatif), led by Prince Norodom Ranariddh and the recrowned King Norodom Sihanouk could win the elections with 45 per cent of the vote, even though the party had formed an alliance with the Khmer Rouge regime for almost ten years. The Revolutionary People Party, which had fought against the Khmer Rouge regime, gained only 38 per cent. The UN-supervised election results were disputed because of irregularities. The results showed that a Khmer Rouge Tribunal was only possible with the support of the King's Party.[13]

One of the reasons why the monarchist élites had such a strong hold over the people was that parts of the population had been misled in the main conflict of the second Cambodian civil war, while a significant number of voters remembered the monarchy as a successful political system, because it had provided stability, prosperity and freedom up until the Vietnam War. Besides, the monarchy was understood by sectors of the population to be an integral part of Cambodia's traditional religious belief system, because the main religion, Theravada-Buddhism, had legitimized and built it up, and it remained the basis for Cambodia's ethical and moral rules. The role of the monarchist élites in installing the Khmer Rouge regime following the first Cambodian civil war and their alliance with the regime during the second civil war were forgotten.[14]

In this situation, the Cambodian People Party had to abstain in the interest of political stability to guarantee Cambodia's economic and social recovery, while the question of justice for the victims of the Khmer Rouge regime had to take a back seat. Prince Norodom Ranariddh was elected prime minister and an all-party government was formed. But in 1997, new military confrontations brought up the question of justice again. The King's party had formed a new alliance with the Khmer Rouge regime, which had been officially outlawed by Cambodia's parliament in 1994. As prime minister, Prince Norodom Ranariddh had guaranteed amnesties for former high-ranking members of the Khmer Rouge regime in return for their military and political support. In September 1996, Ieng Sary was guaranteed an amnesty by 'Royal Decree', while in spring 1997, Nhek Bhun Chey, the highest ranking military general of the King's party, entered into secret amnesty negotiations with General Ta Mok to recruit soldiers of the Khmer Rouge regime. A newly founded non-parliamentarian opposition party, the Sam Rainsy Party, which had split from the King's Party in 1994, supported the renewed alliance, called the National United Front, which sought to disempower the Cambodian People Party as a 'Vietnamese marionette'.[15]

The confrontational politics of the King's party led to the collapse of the coalition government in July 1997 and military confrontations between troops loyal to the Cambodian People Party and the King's party. Prime Minister Prince Norodom Ranariddh was removed by parliamentary vote. The military clashes lasted four

13. For a detailed analysis of the elections see Phal Vorun and Kristina Chhim, 'Free Elections in Cambodia 1993 – On the Way to Democratization?', in Diethelm Weidemann and Wilfried Lulei, *Cambodia – Endogenous and Exogenous Factors of the Conflict Resolution* (Pfaffenweiler: Centaurus Publishing Society, 1998).

14. For a detailed analysis of Cambodia's socio-political culture see Heinz Bechert, *Buddhism, State and Society in the Countries of Theravada-Buddhism*, 2nd edition (Wiesbaden: Harrasowitz Publishing House, 2000); Roger Kershaw, *Monarchy in Southeast Asia – The Faces of Tradition in Transition* (London: Routledge, 2001).

15. See Royal Government of Cambodia, Royal Decree NS/RKT/0996/72, September 1996 (unofficial translation), Phnom Penh, 2004 (www.cambodia.gov.kh/krt/); *Phnom Penh Post*, 'Prince's Khmer Rouge deal laced with treachery' and 'Khmer Rouge-Papers', No. 7, Phnom Penh, 22 May-4 June 1998 (www.phnompenhpost. com); Cambodian Ministry of Foreign Affairs and International Cooperation, 'Crisis in July 1997: A Report on the Insurrection. Its origin, history and aftermath', Phnom Penh, September 1997.

months, leading to the disempowerment of troops loyal to the King's party. In July 1998, the Cambodian People Party was confirmed by the second parliamentary elections. The party gained 41 per cent of the vote, while the King's party lost 14 per cent, gaining only 32 per cent of the vote. Nevertheless, a government could only be formed with the King's party as the 1993 Cambodian Constitution requires a two-thirds majority of parliamentary seats to form a government – an election result, which the Cambodian People Party could not achieve.[16] This further delayed justice for the victims of the Khmer Rouge regime.

Only in December 1998, after the high-ranking members of the Khmer Rouge regime – Khieu Samphan, Nuon Chea and Ke Pauk – with the exception of Ta Mok got amnesties, could a new coalition government with the King's party be formed. Ta Mok went into hiding. Government troops arrested him in 1999 as well as Khaing Khek Iev, alias Duch, the director of the security prison S-21, who had told a journalist about his past after years of hiding. Both stayed in detention until 2005. Nhek Bhun Chay, Serey Kosal, another general of the King's party and a former foreign minister, and general secretary of the King's party, Prince Norodom Sirivudh, who was sentenced to prison for planning a coup d'état in 1995, were also given amnesties as a pre-condition to forming a new government. Any justice for the victims of the Khmer Rouge regime remained out of question.[17]

Reconciliation after the Dissolution of the Khmer Rouge Regime

Even after the Cambodian People Party formed a new coalition government with the King's party, there were no significant moves towards the establishment of a Khmer Rouge Tribunal. At first it seemed that all pre-conditions for the establishment of a tribunal could be met. The Khmer Rouge regime had dissolved in 1999. Pol Pot died on 15 April 1998. The process of dissolution had already started some days before the military clashes between the King's party and the Cambodian People Party in July 1997. Pol Pot had refused any amnesty negotiations with the Cambodian government, while Son Sen, Ta Mok, Khieu Samphan and Nuon Chea wanted to negotiate. In reaction, loyal troops of Pol Pot murdered Son Sen and his family.

However, Pol Pot was arrested in July 1997 by his former comrades and sentenced to house arrest in Anlong Veng, a northern province of Cambodia. The radio station of the regime broadcast a report stating that Pol Pot had been a betrayer. In 1999, the UN sent an expert team for negotiations to establish an UN-supervised Khmer Rouge Tribunal after international and national pressure for justice had risen with the dissolution of the regime. On 6 January 2001, the Cambodian parliament unanimously adopted a Law on the Establishment of Extraordinary Chambers in the Courts of Cambodia for the Prosecution of Crimes Committed during the Period of Democratic Kampuchea.[18]

16. Raoul M. Jennar, *Analysis of the elections results* (Cambodia Research Centre, Phnom Penh, 1998 (www.dithpran.org/cambodia.htm); for another detailed analysis see the author's study, 'Political Culture and Conflict in Cambodia', op. cit., pp. 105-143.
17. Royal Government of Cambodia, 'Renewed detention orders in the cases of Ung Choeun alias Ta Mok and Khaing Khek Iev alias Duch, Phnom Penh 25th February 2005' (www.cambodia.gov.kh/krt); 'Another chapter opens as Hun Sen gives Prince Ranariddh the deal', *Phnom Penh Post*, No. 26, 27 November-10 December 1998; for a detailed analysis see the author's study, op. cit., pp. 123-134.
18. Chandler, op. cit., pp. 178-187.

However, these moves towards the establishment of a Khmer Rouge Tribunal were followed by a new period of delays lasting more than four years and mainly caused by the monarchist élites. First, in negotiations with the UN, the Cambodian People Party insisted on an amnesty for Ieng Sary, the former foreign minister of the Khmer Rouge Regime, which was guaranteed by royal decree. It was held that in the interest of a stabile coalition government with the King's party the amnesty should not be disputed, but it was heavily criticized by the UN and national and international human rights organizations. In February 2002, the amnesty led to the cancellation of the negotiations by the UN. Negotiations only restarted in spring 2003 after the UN General Assembly adopted a new resolution, initiated by the governments of France and Japan. A new agreement by the UN was reached on 6 June 2003. In the revised tribunal law all former amnesties can be approved.[19]

A further delay followed with the parliamentary elections in 2003 caused by the monarchist élites. Even though the Cambodian People Party won the elections, this time with 47 per cent of the votes, while the King's party lost another 10 per cent of its votes (the King's party gained 21 per cent), the latter

again blocked a government building. The Cambodian People Party did not gain the constitutional two-thirds of parliamentary seats to form a government. As a pre-condition to forming a new coalition government, the King's party demanded that Hun Sen should not be re-elected prime minister. The Cambodian People Party refused to comply with this on the basis of the election results. An agreement could only be reached in July 2004, when the King's Party was given more government posts than the party that had actually had won in the elections in return for Hun Sen becoming prime minister. This crisis delayed the ratification of the new tribunal law for another year. But there was a further delay, again caused by the King's party. While the revised tribunal law was adopted unanimously by parliamentary vote on 6 October 2004 and agreements were reached with UN member states to finance two-thirds of the approximately US$56 million tribunal expenditures, King Norodom Sihanouk abdicated without signing the revised law. Before his abdiction in August 2004 he had made a state visit to North Korea, a state which had supported the Khmer Rouge regime. As of November 2005 it was still unclear whether his successor and son King Norodom Sihamoni would sign the new law.[20]

19. See Royal Government of Cambodia, 'Chronology of developments relating to the Khmer Rouge Trial', Phnom Penh, 2005 (www.cambodia.gov.kh/krt/); Thomas Hammarberg (UN chief negotiator between 1997 and 2001), 'How the Khmer Rouge Tribunal was agreed', *Searching for the Truth* (Phnom Penh: Documentation Centre of Cambodia, July 2001) (www.dccam.org); Hans Corell (UN chief negotiator since 2001), 'Statement by UN Legal Counsel Hans Corell at a press briefing at UN Headquarters', New York, 8 February 2002 (www.un.org/News/dh/infocus/cambodia/corell-brief.htm).

20. See UN Press Release L/3082, 'Governments pledge 38.48 million for Khmer Rouge Trial in Cambodia', New York, 28 March 2005; Royal Government of Cambodia, 'Statement on the entry into force of the agreement between Cambodia and the United Nations on the Khmer Rouge Trial', Phnom Penh, 29 April 2005 (www.cambodia.gov.kh/krt/). For a detailed account of the parliamentary elections of 2003 see also the author's study, 'Parliamentary elections in Cambodia 2003', *International Quarterly for Asian Studies*, 35(2): 47-61.

Summary

This study examines the historical context of the main conflict, which can be understood as a deep crisis in Cambodia's monarchy that has caused the long delay in the establishment of the Khmer Rouge Tribunal. The monarchist élites failed to distance themselves credibly from the crimes of the Khmer Rouge regime during the second Cambodian civil war and after the signing of the Paris Peace Accords in October 1991, while the Khmer Rouge regime came to power with the support of King Norodom Sihanouk. The impact was a deep polarization in the Cambodian population. While the Cambodian People Party led a long war against the Khmer Rouge regime and distanced themselves from its crimes, the King's party did not. This led to a critical political situation in which the establishment of a Khmer Rouge Tribunal rather than being a question of justice developed into a question of political stability. As of November 2005, it is yet to be seen if the monarchist élites will step aside to bring the long-awaited justice for the victims and consolidate the peace process in the interest of Cambodia's social and economic recovery.

The Politics of Reconciliation and Constitutional Peace

Roland Czada*

'The subject and the aim of politics is peace ... peace is the political category as such'. So wrote Dolf Sternberger, a political scientist from Heidelberg, in *Three Roots of Politics*, first published in 1978. But how can politics achieve peace when parts of the population are hostile, or even fight each other in hatred? How can reconciliation take place after civil wars, terror, ethnic cleansing and genocide?

History has known many, sometimes tortuous, escape routes from enmity, violence and chaos. Not all of them end up with reconciliation and political stability. Efforts at peace-building can come to nothing when societal conflicts are not truly reconciled but just superficially patched up, as they tend to erupt again sooner or later. This negative scenario is most likely if peace rests on the violent suppression of conflict. Sternberger calls this a 'daemonological peace' – a fragile dictatorial state void of truth and justice. Suppression of conflict often coincides with so-called 'eschatological peace'. Eschatology means the study of last things. Politicians who advocate this kind of peace pretend to ultimately deliver mankind from evil and, thus, fiercely fight their opponents whom they equate with evil. Whether peace-building rests on the suppression of conflict or on attempts to release mankind from conflict, these ways out of civil war do not solve conflicts in a substantial way. As violent or rhetorical solutions they remain subliminal while injustice and the use of illegitimate force continue.

In contrast to the false promises of the daemonological and eschatological forms of peace, the only lasting way out of violent conflict – according to Sternberger – would be to institute a constitutional system of justice and democratic participation. Constitutional peace rests on common and respected rules and on strong institutions of non-violent conflict resolution and interest intermediation. To reach this state of peace requires an act of consensual self-restraint and non-aggression. On the long journey from de-escalating a spiral of violence to a democratic constitutional peace, disarming and peace talks serve only as a first step.

Reconciliation, Restorative Justice, Remembrance

One has to pass through a process of disarming, mediation, external conflict intervention, conflict management and political compromise in order to set up a political constitution that suits the specific requirements of a given society. In this process it is not nearly enough to build formal institutions of conflict resolution, establish a well-functioning administration, organize elections and form a new government. As recent transformation processes in Iraq, Afghanistan, Cambodia

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and elsewhere have shown, there must be additional efforts to build up a consensus on societal values and normative constitutional principles. Without this consensus a political legal order is no more than an empty shell. To come to a lasting peace agreement after times of dictatorship and excesses of political violence, a society and its élites in particular need to face up to the past. There are three challenges that have to be mastered, or else the constitutional consensus and the aim of nation-building are put at risk. The necessary tasks are:

1. Reconciliation and forgiveness
2. Restitution and restorative justice
3. The politics of remembrance and mourning.

The success of a post-conflict democratic transformation depends on the fulfilment of the three Rs – reconciliation, restorative justice and remembrance. Reconciliation bears an individual as well as a collective aspect as can be shown by comparing the recent experiences of South Africa and Germany. The South African Truth and Reconciliation Commission concentrated on individual incidents, individual sufferings and individually committed crimes, that is, on single victims and perpetrators. Offenders confessed their acts of cruelty and asked their victims and their families or dependants to forgive them. Normally, this procedure led to amnesty – eventually backed by the professional judges of an amnesty committee.

South Africa and Germany Compared

The South African approach rests on the life-world experiences of those who suffered. Its excessive media coverage influenced the political attitudes of South Africans and supported their readiness for dialogue – not only in politics but also in everyday life – in the media, in the economy, in corporations, churches, schools and universities of the country. This was a risky endeavour as uncovering and publishing excesses of violence could have seeded new hatred. But the unconditional wish of the societal élites and of the whole population to reach a common better future overcame the wish for revenge.

The option to abstain from revenge and punishment except for the most violent crimes can always be found where political change and transformation rests on a political compromise between the representatives of a former system of injustice and its victims. Beside South Africa, this pattern applies in countries like El Salvador, Namibia, Nicaragua and Uruguay. Most often, documents necessary for penal prosecution have been destroyed

or distorted in these countries. In South Africa evidence was systematically destroyed during the transitory phase up to 1994, when the democratically elected government came into power.

One reason for not practising judicial sanction is the principle of *nulla poena sine lege*: no punishment without law. The legal rule of not punishing when at the time of the offence no law existed restricts prosecution of the most excessive crimes against humanity. The principle ban of *ex post facto* law-making is no longer valid today if basic human rights had been violated or at least if violent crimes against humanity had been committed. Beginning with the UN Human Rights Convention of 1948 and the Nuremberg International Military Tribunal of 1950, such offences have been increasingly banned and made punishable on an international level. The first principle of the Charter of the Nuremberg Tribunal claims that any person who commits an act which constitutes a crime under international law is responsible and liable to punishment. Moreover, as

some new Eastern European constitutions demonstrate, there are exceptions to the rule of 'no punishment without prior law' to be found on the national level if, after regime changes, an act of 'historical justice' seems appropriate.

What happens if, as a result of political compromise or after the destruction of evidence or for judicial reasons, criminal persecution turns out to be impossible or limited. The least politics can do is to make it possible for the subjective truth experienced by perpetrators and victims to come to light in those cases. This is the raison d'être of truth and reconciliation commissions. Truth is what one can offer to the victims if justice is not possible. Clearing up single incidents of crime in that way seems to be a third way between strict prosecution and criminal punishment and it is an alternative to hiding and forgetting the past. Of course this means it is necessary to find a particular kind of truth or a reconstructive effort, which does not necessarily correspond to scientific truth, norms and evidence.

The South African Truth and Reconciliation Commission has been criticized because it did not and could not investigate the systematic working principles of the apartheid regime. The Commission did reveal many truths, yet those were not based on the history and power structures of apartheid. This was a consequence of the Commission's lack of systematic analysis of the fundamental attributes and operating mechanisms of apartheid, especially when compared to other systems founded on political violence and injustice. The widespread critique that a scattered picture of the truth had been reconstructed by the commission should not diminish its historical contribution to the reconciliation and nation-building process in South Africa.

In contrast, the parliamentary study commission 'Coming to Terms with the History and Legacy of the SED Dictatorship in Germany', established in 1992, was committed to 'make contributions to the political-historical analysis and political-moral evaluation' of the SED (Sozialistische Einheitspartei Deutschlands, Socialist Unity Party of Germany) dictatorship. A number of renown historians and members of parliament investigated the following:

- the structures, strategies and instruments of the SED dictatorship (the relationship of SED and state, the structure of the state security organs, the role of the so-called block parties and the militarization of East German society in particular
- the significance of ideology and integrating factors such as Marxism-Leninism and anti-facism (as well as the role of education, literature and the arts)
- human rights violations, acts and mechanisms of repression, and the possibility of further restitution of victims
- the variety and potential of resistance and opposition movements
- the role of the churches
- the impact of the international system and in particular of Soviet policy in Germany
- the impact of the Federal Republic of Germany/German Democratic Republic relationship (inner-German relations)
- the significance of historical continuity in German political culture in the twentieth century.

The commission has documented in more than 15,000 pages over 18 volumes how systemic injustice, surveillance and suppression, and reward and punishment worked in the former socialist German Democratic Republic (GDR). Only victims were heard by the study commission, while perpetrators were charged individually in front of criminal courts. Some have

complained about the fact that reconciliation as a result of public confessions by the perpetrators and acts of forgiving by the victims has not been a public issue. Judicial peace was at stake in Germany rather than an encompassing process of reconciliation and societal reintegration – nation-building, as it was called in South Africa.

Nation–building

Why are both post-conflict reconciliation and efforts to achieve national unity so important for the establishment of a constitutional peace? This question is particularly important because we are – at least in Europe – now living in a post-national constellation in which cosmopolitan attitudes are said to replace the national boundaries of the economy as well as the fields of politics, society and everyday culture. At least political scientists argue that individual nations cease to serve as a primary reference point for personal identity. In Germany, for example, constitutional patriotism is said to have replaced emotional bonds and national pride. But why is it that in the wake of post-conflict transformation, governments do a lot to establish national identities and promote a strong feeling of belonging to a single political nation?

In South Africa, the national government made use of a particular rhetoric of national pride and initiated a national pride campaign. Those who – with a post-modern attitude – feel irritated by the emotional appeal to national unity tend to forget that in most cases of post-conflict reconciliation governments do not strive for ethno-nationalist goals. On the contrary, reconciliation between different ethnic groups is the primary goal of nation-building. The inclusion of all citizens in one state – the rainbow nation, as South Africans call it – is the opposite of the legacy of historical nationalism and the European nation state. A multinational, multiracial and multilingual state, as has been set up in post-apartheid South Africa, had been the anathema of European nationalism. The latter refers to ethnic nations and – as a consequence – has deliberately destroyed multicultural societies. It has even excluded parts of the population from citizenship. In that respect the former apartheid regime and its segregationist homeland policies rested on similar ideological grounds as nineteenth and twentieth century nation-building in Europe, especially when it came to its extreme form of ethnic cleansing.

The Problem of Group Rights

Reconciliatory nation-building along with democratic transformation seems to be the only way to overcome historically deep-rooted conflicts. However, it also poses some intricate problems and even dilemmas for multicultural societies. Nation-building appeals to the feeling of a common identity and, in the course of democratization, is also part of the establishment of majority rule. Thus, in most cases, it strengthens a dominant majority culture at the expense of peripheral minorities. In that respect nation-building not only supports reconciliation but also, at the same time, runs the risk of negatively interfering with it. The goal of national unity does not naturally correspond with a multiplicity of languages, religions, customs and fractured histories. That is why constitutions need to become individually tailored for each country. They must not limp ahead or behind the structural conditions of a given society, as political scientist Otto Kirchheimer has emphasized in view of the

German Weimar constitution of 1919.

Individual tailoring of the constitution is a means of coping with a country's history and its given structure of social and cultural conflicts. This excludes solutions based on the literal copying of foreign constitutions and other ways of ill-considered institutional imitation. The most important constitutional questions are whether a country would be better suited to a unitary or federal system of government, whether political representation should rest on majority or proportional voting, and, last but not least, whether the principle of equal universal rights for individuals should be complemented by collective group rights, usually for cultural minorities or otherwise disadvantaged sectors of the population.

Let me concentrate on the group rights problem since, in contrast to a federalist or electoral design, it requires no 'technical' knowledge of constitutional engineering but reveals a genuine normative political challenge. The question of group rights poses intricate normative problems, which have been investigated by Donald Horowitz and Will Kymlicka, among others. Deep-rooted ideological, religious or linguistic cleavages usually persist in post-conflict constellations. Often they become even more salient due to political negotiations between the leaders of the respective groups. They may also persist in the long run if group affiliations remain strong and thus function as emotional building blocks of individual identities.[1] This can cause a cultural barrier to reconciliation and mutual understanding as well as open conflicts between a universalistic constitutional rights system and contradicting claims of particularistic cultures. Thus, besides its political and legal prerequisites, constitutional peace rests on specific cultural requirements, which cannot be guaranteed by democratic rule systems namely by those of a strict majoritarian origin.

Particular problems arise in culturally segmented societies if the respective segments organize themselves politically, that is, by seeking influence and representation through political clubs and parties. To translate cultural cleavages into stable political alliances together with group politics usually distorts competitive politics and thus impedes future changes of government.

Party cleavages and group voting that are based on ethnic, linguistic or religious conflicts tend to produce permanent structural majorities and thus weaken the democratic process. The pluralist ideal of partisan mutual adjustment is based on a competitive political process in which all parties must have an equal chance of gaining electoral support, otherwise the prospects of political compromise would be seriously weakened. Cultural or ethnic group voting impedes an open democratic competition since election results are determined by the population structure rather than by competitive politics. Moreover, petrified majorities tend to permanently exclude large parts of the electorate from government and thus may interfere with the aims of democratic transformation.

Majoritarian democracy has occasionally led to the exclusion of minority factions and democratic counter élites from political decision-making and has thus facilitated despotism and dictatorship. This is particularly true for a number of post-colonial African countries in which governments failed to build national

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1.   It is important to note here that the term 'cleavage', as introduced by political scientist Stein Rokkan from Norway, constitutes an antidote to any kind of psychological or sociological reductionism that treats politics as a mere reflection of underlying social, cultural or psychological processes. It implies that social divisions are not translated into politics as a matter of course, but that they are decisively shaped by their political articulation.

identities and instead reinforced political divisiveness. This happened through the establishment of clientelistic support based on structures which followed social, cultural and ethnic cleavages. What can be done in cases of deep-rooted social, cultural and religious cleavages that do not overlap, reinforce each other and thereby fail to produce patterns of multiple belongings and overlapping membership? One possible answer would be to create arrangements of political power-sharing between groups of a society.

The politics of power-sharing is supposedly facilitated either by counter-majoritarian constitutional devices (e.g. federalism, bicameralism, proportional voting) or informal patterns of non-majoritarian decision-making (e.g. coalition governments or corporatist arrangements). It is based on cooperation and negotiations between various political stakeholders but does not necessarily interfere with party competition in the electoral arena. Competitive party politics and bargaining practices between national and provincial governments, governments and unions, or governments and autonomous central banks do not exclude each other but have to be seen as two different sub-systems or tiers of policy-making. Negotiation democracy is used as the generic term for a number of power-sharing arrangements.

Power-sharing and Negotiation Democracy

According to current theories of negotiation democracy, a certain number of elements in modern political systems would help to channel deep-rooted social conflicts, foster compromise and simultaneously limit the power of structural or situational majorities. Generally three such elements can be distinguished in negotiation democracy:

1. Consensus politics and party concordance as indicated by grand coalitions representing a super-majority of the electorate.
2. Corporatist interest intermediation based on networks between the administrative state and civil society organizations, such as, for example, unions, business associations and non-governmental organizations.
3. Constitutional power-sharing as indicated by federalist or bicameral political systems, constitutional review, etc.

South Africa has attributes of more or less all three dimensions of negotiation democracy. It has become a grand coalition state and even more so as the New National Party – the successor of the former governing National Party of the apartheid period – joined the African National Congress (ANC) in 2004. As the incumbent party, the ANC represents about 70 per cent of the electorate. The ANC itself has emerged from a coalition of the ANC liberation movement, COSATU (unionist party) and the South African Communist Party. Together with the KwaZulu-based Inkhata Freedom Party, the South African government is now composed of a super-majority of almost 80 per cent of the electorate. Additionally the country's political system bears features of corporatism since the labour unions are closely intertwined with the ANC and – through the NEDLAC (National Economic Development and Labour Council) programme – also with the executive branch of government. Not least, South Africa's constitutional court has a strong voice especially when it comes to defining the interface between constitutional law and elements of customary law as applied in indigenous and religious communities.

Post-apartheid South Africa has put in place a constitution that is particularly well drafted and quite progressive, yet also recognizes some customary marriage and inheritance laws, for instance. Many countries during their transition to democracy face tensions and dilemmas in that respect. Muslims, for instance, have been allowed to adopt Islamic legal codes, which often concerns local residents of other religions. The persistence of community laws within a legal system is not unique to less developed countries of the South. Marriage and divorce laws are hardly 'uniform' in the United States either, since they vary from state to state, by communities defined geographically rather than religiously. Another parallel worth considering is that reservations for Native Americans have been granted some limited legal autonomy in the United States context. In Europe inherited customary and provincial laws survived far into the twentieth century.

In countries where the values of sectors of society are based on group rights rather than those of the individual, social and legal conflict has ensued. While proponents of social engineering eventually hope to change norms sufficiently to reconcile the clash between customs and rights, namely constitutional individual rights, some religious law is not by its very nature amenable to such pressure, even if political leaders are.

There is a certain ambivalence in the constitutional establishment of collective group rights as advocated by proponents of 'cultural pluralism' since such rights may both reduce and engender cultural conflicts. Group rights seem to be tolerable, for instance, in order to compensate those groups who suffered most from injustices of the past. The black empowerment programme of the South African government is a case in point. Its aim is to increase the portion of black Africans in the upper strata of the economy and it is thus confined to economic and social compensatory measures. Group rights would be hardly tolerable, however, if they hurt the principle of equal legal and political rights.

Problems arise when groups try to translate cultural differences into political differences. Most often such attempts involve demands for political autonomy and self-government. If such groups live in separated settlement areas and are politically under-represented, there is a certain danger of secession. In South Africa, for instance, the national ANC government played down the issues of full federalism and minority safeguards. Inkatha leader Chief Mangosuthu Buthelezi, who headed the provincial government in KwaZulu-Natal, recognized the trend toward centralization, and therefore insisted that the provincial governments should have 'significant powers'. In September 1996, the constitutional court refused to approve a new provincial constitution drawn up by the KwaZulu-Natal legislature, contending that it far exceeded the powers that the provincial legislature could rightfully claim. Similar centralization tendencies can be found throughout the developing world. Often dominant parties agree to quasi-federal compromises in an effort to allay minority misgivings and to smooth the way to decolonization. Then, with independence in hand, they quickly dismantle concessions on regional autonomy and centralized political control over their societies.

The idea of a nation based on equal individual rights for all citizens forms a sharp contrast to the institution of special rights not for individuals but for collectivities. In the course of the politics of post-conflict reconciliation and constitution-building this contrast often becomes a source of new tensions. To resolve them requires a carefully thought-out constitutional design. Existing consensus democracies with their special

arrangements of power-sharing may give some indication of how this challenge can be met successfully. Some European countries, such as Switzerland, Austria, Germany and the Netherlands, and not least the new South Africa, have shown how non-majoritarian institutions can be employed in order to achieve reconciliation and constitutional peace in a given particular context.

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The 'New Economy' from Below: Networks of Mass Production in the IT Industry*

Boy Lüthje**

Since the 'microelectronics revolution' took off in the 1970s, the information technology (IT) industry has become a key sector for technological and economic development in East and Southeast Asia. Initially, countries such as Singapore, Taiwan, Malaysia and Thailand emerged as low-wage assembly hubs for multinational corporations. Later, these economies experienced substantial industrial upgrading, which resulted in the development of often massive production complexes for the production of sophisticated equipment and components, including chip assembly, wafer manufacturing and assembly of computers, servers, disk-drives or mobile telephones, as well as the development of increasing capabilities in product, software and chip design. In this modern industrial environment, unions exist in a small number of countries only – often a reflection of the suppression of labour rights. With an increasingly skilled workforce at all levels, the contrast between economic development on the one hand and the underdevelopment of workers' representation on the other is often staggering.

The recent crisis in the IT industry, which peaked in 2001 and 2002, has accelerated the dynamics of this development and its contradictions. The bursting of the 'New Economy' bubble has engendered unprecedented job cuts in every major segment of the industry, affecting both industrialized and developing regions. In the United States and Europe, the recent round of restructuring, mergers and plant closures has moved the IT industry another step closer towards a mere 'service industry', with companies concentrating on design, sales and service of IT systems. In Asia, global overcapacity has resulted in plant closures and massive job losses in key industry segments such as disk-drives, computers and contract manufacturing. More developed locations such as Singapore, Hong Kong, Taiwan and South Korea have experienced relocation of manufacturing and lower-end engineering jobs to low-cost countries, especially China. China has assumed a key role in the global production system of the IT industry as a location for basic manufacturing and increasingly engineering, as well as being a huge market for IT products of all kinds.

In order to understand the challenges resulting from these complex changes for the labour movement, an analysis of the changing production model of the high-tech industry in the global context may be helpful. As an introduction, we will (1) look

at the fundamental transformation from old-style electronics manufacturing following the 'Fordist' model of mass-production to new network-based industry models, (2) discuss the trend towards large-scale outsourcing in IT-manufacturing, (3) trace the transition from traditional multinational corporations to global industry networks and their implications for developing economies, and (4) describe some emerging key issues for labour and social activists.
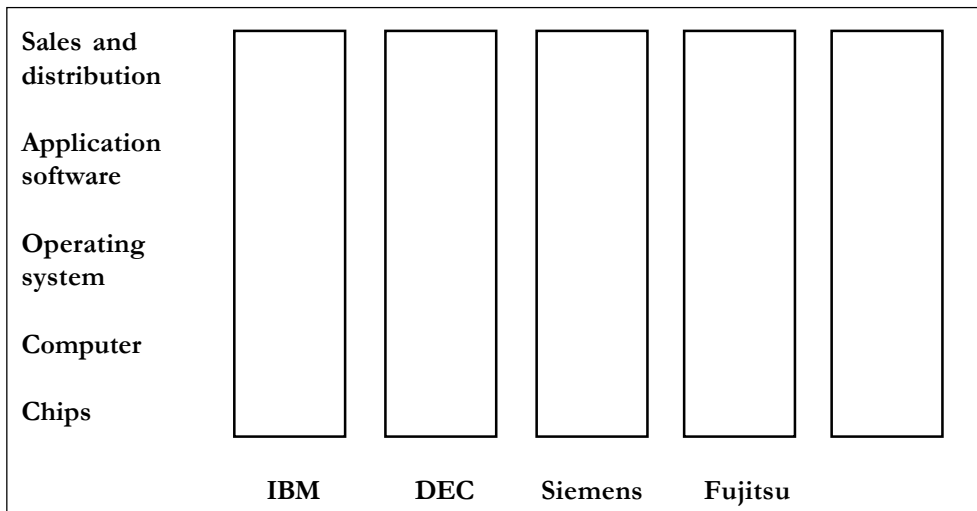
From Fordism to Wintelism

Since the late 1980s, the IT industry has undergone massive restructuring. The industry was reshaped by a new brand of companies specializing in hardware and software products for the PC industry, computer servers, Internet equipment and mobile computing devices such as laptops or handheld digital assistants. This type of company was initially created during the 1970s in Silicon Valley in California, particularly among the newly emerging chip companies such as Intel, National Semiconductor and AMD, and later in the PC industry led by Apple, Microsoft and Compaq. Other than the first generation computer and electronics companies such as IBM and Digital Equipment in the United States, Fujitsu in Japan and Siemens in Germany, most Silicon Valley companies did not produce entire computer systems but only some key components such as a microprocessor or a software operating system (Ferguson & Morris, 1993).

Since the advent of the 'PC revolution' in the second half of the 1980s, companies such as Intel, Microsoft, Sun and Cisco have acquired global dominance and initiated a massive shift in industry structure, which was accompanied by a crisis in many established computer companies (most visibly IBM and Digital Equipment). Most of the older computer companies designed and produced the key components of their own computer systems in-house. This model was very similar to the model of mass production established by Henry Ford in the automobile industry during the 1920s and 1930s, based on the idea of the concentration of various stages of the manufacturing processes and large numbers of workers within integrated corporations. With the emergence of specialized technology companies such as Intel or Microsoft, the production system of the computer and later the telecommunications industry became more and more 'modular': computers, servers, Internet-routers, etc., are assembled from standard components such as chips, operating software, disk-drives, modems or displays, which can be bought on the open market and configured in various ways for products of different competitors (Lüthje, 2001).

Referring to the brand names of Microsoft and Intel, some economists coined the term 'Wintelism' (Borrus & Zysman, 1997) to describe the new production system. Market control is based on the ability of these companies to define new products by breakthrough technologies or product designs and to secure profits by creating a quasi-monopoly position for a certain period of time (as in the case of the microprocessor by Intel, the PC operating system by Microsoft, or the Internet router by Cisco). Except for cases where older models of monopolistic market control are still in place, the proliferation of the respective products is reinforced by technical standardization that allows a maximum number of downstream developers and manufacturers to cooperate on follow-up and auxiliary products, thereby creating a

Figure 1: The Vertically Integrated Computer Industry Circa 1980

Sales and distribution

Application software

Operating system

Computer

Chips

IBM　　**DEC**　　**Siemens**　　**Fujitsu**

Source: Adapted from Grove, 1996.

Figure 2: The Horizontal Computer Industry Circa 1995

Sales and distribution	**Retail stores**	**Superstores**	**Mail order**
Application software	**Word**	**Word Perfect**	**etc.**
Operating system	**DOS/Windows**	**OS/2**　**Mac**	**UNIX**
Computer	**Compaq**　**Dell**	**Packard Bell**　**HP**	**IBM**　**etc.**
Contract manufacturers	**Solectron**　**SCI**	**Flextronics**	**IBM**　**etc.**
Chips	**Intel Architecture**	**Motorola**	**RISCs**
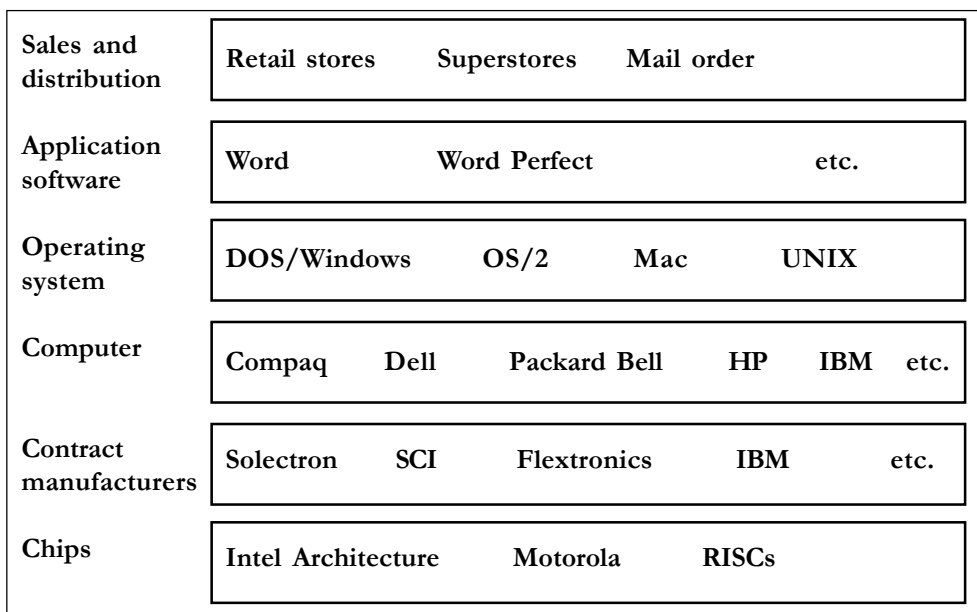
Source: Adapted from Grove, 1996.

ripple effect for the dissemination of the 'open-but-owned' product architectures of the market leaders (Grove, 1996). Manufacturing is no longer considered a core competency for market control; most of the key companies in Wintelist segments in the industry do not have manufacturing of their own as only the very top monopolists like Intel can afford the enormous investments in new plants and processes.

In this system of network-based mass production (Lüthje, 2001; Lüthje, Schumm & Sproll, 2002), the industry-wide division of labour is described by four basic facts:

1. Most IT products have become complex commodities, assembled from traded parts and components supplied by various industry segments. The control of the time-cycle of new technologies and products has become the chief problem of manufacturing organization in the industry.

2. As market control has shifted from assemblers to 'product definition companies', product innovation is increasingly separated from manufacturing. This implies also that brandname companies increasingly lose interest in keeping manufacturing close to their headquarters in industrialized countries.

3. In contrast to many older industries, today's IT industry has no 'focal corporations' that coordinate the value chain through their own manufacturing operations. The 'supplier pyramid' governed by large-scale final assemblers (as in the auto industry, for instance) is replaced by networks of interacting industry segments. Hierarchy is defined by the flagships' ability to control technology development in key market segments (Borrus, Ernst and Haggard, 2000; Ernst, 2002).

4. The acceleration of technology and product development has produced enormous instability across the value chain. Rapid expansion through the creation of new product markets is accompanied by old-style cycles of overproduction and surplus capacities – a situation that was at the core of the massive slump in the high-tech industry in 2001 and 2002.

'Factoryless' manufacturing

The growth of the Wintelist industry model has engendered a rapid expansion of subcontracting networks in manufacturing. Traditionally, subcontractors were relatively small firms in high-tech centres like Silicon Valley, which assembled printed circuit boards and standard electronic components like resistors, coils or cables. During the 1990s, a new type of sub-assembly company emerged, called contract manufacturers (CM). These companies, which tend to be very large and global in scope, provide integrated manufacturing services for brandname companies, known under the industry acronym of electronics manufacturing services (EMS). In contrast to traditional sub-assemblers, CM-companies provide every element of systems manufacturing including product engineering, highly automated assembly of printed circuit boards, final assembly and configuration of computers and other IT devices (called box-build), as well as components purchasing, distribution logistics and repair services (Sturgeon, 1997; 1999).

Contract manufacturers have become important players in the production chain, currently accounting for about 15-20 per cent of global value added in IT manufacturing. As listed in Table 1, these companies have multi-billion dollar revenues. Their toughest competitors are

found among another brand of subcontractors called original design manufacturers (ODM), most of them based in Taiwan, which assemble products for brandname companies, but still own the product design (these companies for example manufacture most of the world's notebook computers sold under brandnames like Dell, Compaq/Hewlett-Packard). The small-scale subcontractor, however, has not disappeared. Most companies of this kind today are concentrated in low-wage manufacturing areas where they work as suppliers of cheap standard components assembled at low wages for CM and brandname companies. China's Guangdong province is said to have the largest concentration of such low-end suppliers in the world.

Table 1: Top 10 Electronics Contract Manufacturers, 2003

Company	Country	Revenue (US$ billion)	Type of Business
Flextronics Int'l	US	13,822	EMS
Solectron	US	11,144	EMS
Foxconn (Hon Hai)	Taiwan	10,899	EMS/OEM
Sanmina-SCI	US	10,795	EMS
Quanta	Taiwan	8,576	ODM
Celestica	Canada	6,735	EMS
Asustek	Taiwan	5,747	ODM/OBM
Jabil Circuit	US	5,170	EMS
Compal	Taiwan	4,760	ODM
Mitac	Taiwan	4,564	ODM

Source: Electronic Business 300, 1 August 2004.

The birth of contract manufacturing was marked by IBM's entry into the PC market in 1981, when the company contracted the assembly of motherboards to a no-name manufacturing company – SCI of Huntsville, Alabama. Since the mid-1980s, some newcomers in the computer and network equipment industries in Silicon Valley, Sun and Cisco in particular, teamed up with specialized contractors like Solectron (a former solar energy company) or Flextronics, who subsequently became the leading players of the new industry. Companies like Sun and Cisco are essentially 'factoryless', that is, they have minimal or no manufacturing capacities of their own, just like brandname firms in the garment and shoe industry, such as Nike (Sturgeon, 1999).

The relationships of contract manufacturers with older brandname firms in the United States and Europe rapidly developed during the second half of the 1990s. This happened mainly through the acquisition of entire plants through contract manufacturers from established companies like IBM, Texas Instruments or Lucent. In 1997, Swedish telecommunications manufacturer Ericsson was the first European brandname firm to sell off entire production units, followed by Europe's largest electronics producer, Siemens, which sold an important server manufacturing facility in Germany in 1999 and several other PC and mobile telephone plants in 2000.

The rapid expansion has brought about a highly diverse spectrum of outsourcing relationships. For 'fabless' technology definition companies such as Cisco, 3Com or Microsoft (for its X-Box game console), contract manufacturers perform full-scale system manufacturing. Older brandname companies maintain similar production relationships through their outsourced plants, often in competition with their own remaining facilities. Specialized mass-producers in the computer industry like Dell, who still consider final assembly as an important interface with the customer, use contract manufacturers for the large-scale manufacturing of printed circuit boards or pre-assembled product kits. In addition, such companies outsource systems assembly in key foreign markets, mostly to medium-sized local contract manufacturers. The only group of major brandname firms that are cautious about using contract manufacturers are Japanese and Korean electronics firms, which prefer to rely on subcontractors within their own corporate 'families' (Lüthje, Schumm & Sproll, 2002). However, CM-based manufacturing is increasingly used by major Japanese electronics companies, such as Sony in the case of its Play Station game console, which, in early 2003, was shifted to the Chinese plants of two major Taiwanese assemblers, HonHai (also known under the brandname of Foxconn) and Asustek (*South China Morning Post*, 13 March 2003).

The recession has accelerated the trend towards large-scale outsourcing like Sony's. Figures from leading consulting firms indicate that the very rapid growth of the EMS industry came to an abrupt halt in 2001 and 2002. The former growth rates of 25+ per cent per year declined to zero and there was even a modest contraction of the industry. However, during the recession, business media were full of news of big outsourcing deals between well-known multinational brandname firms, such as IBM, Ericsson, Lucent, Philips, Siemens, with major contract manufacturers, indicating that EMS will remain a growth business. In some cases, contract manufacturers have taken on the task of restructuring the supply chains of several major OEMs at the same time, as in the case of Sanmina-SCI, which took over most PC manufacturing for IBM, before the entire PC division was sold to China's Lenovo group in 2004. The fastest growing player since the recession has been CM from Taiwan, which is said to be most efficient in exploiting the economies of low-cost manufacturing in China. The largest Taiwanese player, Foxconn, has seen revenues grow by up to 60 per cent in recent years. According to figures from the government of the People's Republic of China (*Renmin Ribao*, 16 June 2003), the firm has become the mainland's second largest exporter of industrial products – its campus in the high-tech metropolis of Shenzhen houses tens of thousands of workers.

Global Production Networks and Uneven Development

Historically, the electronics industry had been on the forefront of shifting labour-intensive assembly work to low-cost locations in Third World countries. Beginning in the 1960s and 1970s, the growth of offshore assembly shaped what was then called 'The New International Division of Labour' (Fröbel, Heinrichs & Kreye, 1977). United States merchant chip makers from Silicon Valley were among the first to build global manufacturing organizations with relatively large chip assembly plants in Asian locations, especially in Hong Kong, Singapore, the Philippines and Malaysia.

These plants often employed thousands of workers, most of them women, who

were considered best suited for the tedious work of wiring tiny microchips. The workplace in these plants in many ways resembled the assembly lines of early twentieth century capitalism – mostly manual labour with highly segmented tasks and strict control over the workers by supervisors and managers. In the chip industry, those plants mostly performed the back-end work of packaging chip wafers into little plastic cases, including wiring, soldering and testing. The more sophisticated elements of chip making, design, prototyping and wafer fabrication were located close to the headquarters of major chip makers in regions such as Silicon Valley or other emerging chip production centres in western United States such as Austin, Portland or Phoenix (Henderson, 1989).

With the massive globalization of production throughout the 1980s and 1990s, the international division of labour has changed significantly. The 'global assembly line' has been superseded by complex forms of international production that link local and regional industry clusters under global strategies of product development and marketing. Most high-tech districts in industrialized and newly industrializing countries develop certain competitive advantages with regard to the manufacturing or design of specific products or components, such as Silicon Valley in chip development and semiconductor machinery, Singapore in hard disk drives (HDD), or Taiwan in motherboards and notebook computers (Lüthje, Schumm & Sproll, 2002). These regions combine their strengths in a specific segment of information technology with cost and logistics related advantages like low wages, proximity to certain key markets, or well-developed infrastructure in air, sea or road transport, offering a global infrastructure for brandname companies to locate and optimize production along a complex set of parameters including wages, transportation and communication costs, taxes, tax benefits and government subsidies, tariffs and political stability.

This shift in the international division of labour has been closely related to the overall trend of vertical specialization in the IT industry. As Borrus, Ernst and others (2000) have pointed out in detail, the vertically specialized industry model of the 1990s is essentially based on global or cross-national production networks. The development of the last five to ten years is characterized by the demise of the traditional integrated multinational manufacturing company, such as IBM, General Electric or Philips, as the driving force behind the internationalization of production. As these companies have lost important terrain to specialized newcomers from Silicon Valley and other high-tech regions, global production has become increasingly based on networks of interacting companies and suppliers, controlled by certain 'flagship' companies (Ernst, 2002). A typical example of such a flagship company is Cisco, the world market leader in Internet switching equipment. This company commands a vast network of suppliers in product development, software design and even basic research. At the same time, it is almost entirely 'factoryless' with more than 95 per cent of the manufacturing of Cisco routers, switches and peripherals performed by a network of contract and ODM manufacturers in about 15 locations world-wide.

Contract manufacturing companies offer 'one-stop-shopping' for production, design and logistics services to multinational OEM customers. This has resulted in a massive build-up of integrated manufacturing capacities in low-cost countries in every major region of the world market, particularly in Malaysia, China, Mexico and Hungary. Most of

these plants – many of them full-scale industrial parks – have a wide spectrum of manufacturing and support functions, such as printed circuit board assembly, final assembly ('box-build'), metal stamping, plastic injection moulding and manufacturing of raw printed circuit boards, including the related functions of process, component and software engineering. Propelled by the recent recession, there is also an increasing array of higher-end production, including prototyping and product introduction moving to these regions. Generally speaking, at the manufacturing end of global production networks there is a massive vertical re-integration of work processes: traditional, Fordist-style integrated mass-production is being introduced in a new way in a number of manufacturing centres in low-wage countries (Lüthje, 2002; Sproll, 2003).

An increasingly important trend in this scenario is the massive shifting of engineering work to developing countries. Hardware and component development is now following the software industry, which, since the 1990s, has seen a large-scale shift of low and mid-end engineering work to developing countries, particularly India, resulting in an ongoing shift of relatively well-paying engineering and design jobs away from industrialized countries (Beckman, 2003; Müller, 2003).

However, in spite of the increasing re-integration of manufacturing and engineering resources within and between the various high-tech centres in developing Asia, the division of labour between the respective economies remains highly uneven. In Southeast Asia, IT production networks resemble a 'hub and spoke system', in which Singapore occupies the position of the regional headquarters for multinational brandname firms and major international contract manufacturers, whereas Malaysia, Thailand, the

Philippines and Indonesia offer low-cost mass manufacturing and engineering resources of various specializations and levels of technology. Similar geographies of production can be observed within the 'China circle', with Taiwan as the major hub for ODM contract manufacturers along with other highly sophisticated companies in the field of chip design and manufacturing (e.g. the famous Taiwanese 'chip foundries' like TSMC or UMC).

As some of the older divisions of labour between industrialized and 'Third World' countries have been transplanted into the emerging industrializing regions in Asia, the competition between the various locations and national economies hosting parts of the global production system of today's IT industry has increased dramatically. Notwithstanding the substantial size and scope of investments in IT manufacturing facilities, transnational capital remains highly mobile between locations, exploiting the different social and political conditions and the competition in industrial upgrading and technological learning. For example, massive capacities in key components such as hard-disk drives or in contract manufacturing for PC, server and Internet equipment have been shifted from Malaysia to China and other locations in the wake of the recession of 2001/2002, resulting in the loss of thousands of jobs in industry centres like Penang. On the other hand, the contract manufacturing base in Malaysia has been upgraded substantially due to the shifting of more specialized products and processes from more developed locations, nearby Singapore in particular. For workers, this intensified international competition remains a zero sum game, since the upgrading of skills and the increased learning requirements inside and outside the factories often does not translate into higher wages, better benefits and increased employment security (Lüthje, 2005).

The Challenge: Controlling Networks of Mass Production

In summary, the high-tech industry of the twenty-first century has developed into a global system of network-based mass production, which combines decentralized and highly flexible forms of industry organization with traditional economies of manufacturing in large-scale plants and corporations. The most striking feature of this development is described by the fact that modern mass production is increasingly concentrated in a number of high-tech regions in low-cost countries, where highly integrated plants with state-of-the-art manufacturing technology are employing thousands of workers. In the industrialized countries, the large-scale shift of manufacturing resources creates the impression of high-tech increasingly becoming a 'post-industrial' service industry based on networks of 'factoryless' and 'science-based' companies. A global perspective, however, reveals that specialization at the top of global production systems is matched by an increasing vertical integration at the bottom, that is, in mass manufacturing plants in low-cost regions.

The simultaneous process of specialization and global re-integration has not only significantly reshaped the IT industry's model of production, but it has also reinforced the chronic economic instability of high-tech. The bursting of the 'high-tech bubble' in 2000 was not only a result of unprecedented speculation and overblown profit expectations, caused by largely uncontrolled financial markets (Brenner, 2002). It is also related to the profound transformation of the production system during the 1990s. The increasing separation of technology design and development, marketing and market control from manufacturing has enabled brandname companies to play the game of 'breakthrough innovations' and extra profits at an ever faster pace. On the downside, the massive shift of manufacturing to global networks of subcontracting has shifted the risk of the Wintelist industry system to no-name contract manufacturers and the workers and communities in their major manufacturing locations. Against this backdrop, the big divide in the era of 'Wintelism' is the increasing separation of brandname control from the social and ecological impact of high-tech manufacturing.

For trade unions and social and environmental activists in the high-tech industry, this creates a whole set of new challenges. The common problem is how to establish or re-establish social and political control over a global production system that is becoming more and more concentrated and more and more fragmented at the same time. One key question – well known from other industries based on global networks of subcontracting products such as garments, toys or sports shoes – is how to hold brandname producers responsible for the labour, safety and environmental conditions in and around their subcontractors' plants. However, the complexity of the high-tech industry makes this task much more difficult than in the aforementioned industries.

Against this background, the key problem in the altered balance of power in high-tech is the social re-organization of the workforce in order to secure minimum rights and an equal playing field for workers in various workplaces and locations. This, of course, points to the bread-and-butter question of organizing workers into trade unions in order to prevent the race to the bottom between companies and workers on wages, benefits and working hours. Effective control of labour standards requires industry-wide

organization of the workforce in particular regions and national economies. It is also clear that this cannot be achieved by in-house unions but requires genuine industrial unions. Given the transnational character of today's production networks in the IT industry, it seems evident that such an agenda calls for effective coordination between unions in the respective countries, at least at the regional level.

Here, the problems of trade unions in industrialized and developing countries converge. In the United States and Japan, industry-wide union representation barely existed in the IT industry, and in Europe it has been increasingly undermined in the course of restructuring in the last decade. For example, United States unions never looked at organizing drives in new industry segments such as contract manufacturing, although American Federation of Labor - Congress of Industrial Organizations (AFL-CIO) President Sweeney and major unions often talked about organizing the new low-wage force in the United States during the late 1990s. In Europe, even well-established unions like IG Metall in Germany are facing increasing difficulties in maintaining industry-wide wage standards under the assault of major corporations on the established bargaining system, such as in the recent conflict over Siemens' threatened closure of its last remaining mobile telephone manufacturing factory in Germany.

Re-establishing social and ecological control over today's global production systems is definitely linked to the massive challenge of organizing and reorganizing union representation and a viable workers' movement in the IT industry. On the other hand, the size and the key position of IT for technological, industrial and social development call for a new set of national and international industrial policies, which link control over technology development and markets with establishing and reinforcing social standards of work in the industry. This challenge has been around for quite some time in many advanced manufacturing industries in developed capitalist countries. However, the global scope of production networks in high-tech calls for genuine global strategies.

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The Electronics Industry and Trade Unions

Robert Steiert

In 2004, a report on the working conditions of suppliers to computer manufacturers IMB, Dell and Hewlett Packard released by the British non-governmental organization, the Catholic Agency for Overseas Development (CAFOD), caused great concern. The subject matter of the report was the factories in China and the Maquiladoras in the north of Mexico. The report[1] highlighted the inhumane conditions of the computer industry under which women in particular have to work These working conditions were thought to have long been overcome. How could they have developed almost unnoticed by the world's public?

Contract Manufacturers as the 'Extended Work Bench' of the Brand-name Companies of the Electronics Industry

The structure of the electronics industry has changed dramatically over the past 15-20 years, and this process has by no means come to an end. Further changes with a substantial impact on employment are expected, particularly in the telecommunications sector as it grows closer to the information technology sector.

So far, the public has not taken sufficient notice of these changes. The information and communication technologies (ICT) industry is mainly perceived as a 'services sector', even by many trade unions. The fact that the ICT sector has also become an experimental ground for new models of industrial manufacturing is often overlooked (Lüthje & Sproll, 2002:5).

Dramatic changes have taken place in the manufacturing of information technology (IT) hardware, which is still the core business of the sector. Computer companies used to correspond mainly to the model of a vertically integrated corporation, which manufactured all the essential elements of a computer system 'under one roof'. These elements were semiconductor chips, which were mainly or even exclusively produced for the manufacturer's own needs. Computers were produced in highly integrated assembly plants. As far as the software is concerned, the key to market control was the fact that manufacturers created operating systems with their own user programs that tied customers to the product (Lüthje, Schumm & Sproll, 2002:27).

However, these structures began to change in the middle of the 1990s. The vertical production chains were split up into relatively independent segments, which provided certain hardware and software components, specific production lines or a number of sales and distribution services. Devices and systems of IT hardware have turned into products that are manufactured

1. The report can be downloaded at www.cafod.org.uk/policy_and_analysis/policy_papers/private_sector/ clean_up_your_computer_report

in complex, globally organized value chains.[2]

The production of PCs, servers, network computers, telecommunication devices (mobile phones, telephones, switching equipment, etc.) and a growing number of other electronic equipment (televisions, hi-fis and even auto electronics) has been shifted from the big brand-name companies to a new generation of globally operating contract manufacturers.

The technical terms 'electronics contract manufacturing' (CM) and 'electronics manufacturing services' (EMS) are applied to describe this sector. Companies in this sector mainly produce electronic parts (printed circuit boards). However, they are increasingly assembling entire hardware systems, including design, development, logistics as well as maintenance and repair. This outsourcing process goes far beyond the forms of outsourcing known in the automotive sector (keywords: 'lean production' or 'modular manufacturing').

In recent years, contract manufacturing has been one of the fastest growing areas of the electronics sector with growth rates of 20-30 per cent during the 1990s. During the recession that started at the end of 2000, these high growth rates slowed down, but strong growth can be expected in the future. This is underlined by the fact that the share of CM in the total volume of global electronics manufacturing has continuously grown from below 5 per cent at the beginning of the 1990s to roughly 13 per cent at the beginning of 2000 (Lüthje & Sproll, 2002:7).

The market of contract manufacturing is estimated to have a total annual turnover of US$100-120 billion, shared by a variety of companies. Here too, a rapid concentration process is becoming apparent. Merrill Lynch estimated that in 2000 the five largest CM companies attained a share of 50 per cent in the sector's total turnover. These five companies – Flextronics, Solectron, SCI-Sanmina, Celestica and Jabil Circuits – are all located in North America. Solectron and SCI-Sanmina are located in Silicon Valley, California, while Celestica is based in Toronto, Canada and Jabil Circuits in Florida. Only Flextronics has shifted its headquarters from the USA to Singapore.

These companies, however, are much more than mere suppliers to the ordering IT corporations. They act as 'global supply chain facilitators', as managers of globally extended production chains that provide the orderers with manufacturing plants, engineering know-how and logistics in all important markets of the triad. Thus they have turned into veritable transnational corporations (Lüthje, 2001:89).

The names of these corporations are largely unknown to the public even though they all own several dozen manufacturing plants in all parts of the world and employ tens of thousands of workers worldwide. The reason for this is that their logos do not appear on any of their products. The *Los Angeles Times* (27 September 1999) dubbed them 'stealth manufacturers'.

The outsourcing process from brand-name companies to contract manufacturers can mainly be observed in the USA and to a lesser degree in Europe. So far, only the large IT manufacturers in East Asia, primarily Japan and South Korea, have largely refrained from using contract manufacturing in their home regions, preferring to cooperate with an extensive

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2. In scientific literature, this development is called 'Wintelism', a combination of 'Windows' and 'Intel'. IBM was the first company to outsource two core businesses of PC manufacturing to suppliers: the development and production of the microprocessor (CPU) was given to Intel and the development and production of the operating system was given to Microsoft.

network of suppliers within their own 'corporate families'; however, this could easily change in the future. Sony, for example, has already taken the first steps: after having sold a number of plants that are located outside the region to some CM companies, a plant in Taiwan and another one in Japan were sold to Solectron in October 2000.

The Electronics Industry and Trade Unions

The structural changes in the ICT sector and the emergence of the CM sector has modified the labour conditions of the manufacturing plants of these corporations.

The computer industry is characterized by a number of companies that sell hardware but no longer have their own manufacturing plants. In addition to this development, a strong process of concentration can be observed. Companies such as Compaq or Digital Equipment (DEC), which contributed significantly to standardizing hardware, have disappeared from the market. After having incorporated DEC, Compaq itself was swallowed up by an even bigger fish, namely Hewlett Packard (which now seems to be choking on it). At well-known brand-name companies, such as Dell, IBM, Hewlett Packard, etc., we find almost exclusively white-collar workers because hardware production has mainly or even completely been outsourced to contract manufacturers. However, even in the 'old economy' it has always been more difficult to organize white-collar workers than blue-collar workers, who meanwhile work mainly for contract manufacturers.

Also in this sector, unionization rates differ greatly from country to country and from continent to continent. In the USA, the mother country of well-known computer makers and the most important CM companies, unionization tends towards 'zero' in IT factories – be it among white-collar workers at Microsoft development laboratories or blue-collar workers in the few remaining contract manufacturing production plants.

There are many reasons for this, from the structure of society to a restrictive labour legislation that offers employers and companies a variety of ways of fighting unionization by all possible means. Furthermore, conservative judges at labour courts, such as the National Labor Relations Board, see to it that lawsuits filed by trade unions on the grounds of a violation of the National Labor Relations Act are interpreted to the benefit of employers. Another reason might be the working conditions that have evolved, particularly in the contract manufacturing companies, due to their highly service-oriented manufacturing system. This system is characterized by relatively low wages and social benefits, a high degree of precarious employment and an above-average employment of women and ethnic minorities (cf. in particular Lüthje & Sproll, 2002: 17ff).

And finally, further problems can be pinpointed in the American trade unions themselves: in recent years, they seem to have developed very few suitable and successful strategies to organize workers in this branch of industry. In the IT sector, including the contract manufacturers, there have been no serious attempts to carry out organization campaigns because a number of American unions would not focus on unionizing 'non-white', mostly female 'low-wage workers' (Lüthje, 2001:84; Lüthje & Scherrer, 1997). In addition to this, factories belonging to the CM corporations were mainly established in the southern and western parts of the USA. These are regions where unions are traditionally less present

than in the 'old' industrial centres of the north. Furthermore, these states are often so-called 'right-to-work states', where regulations were enacted at state level, which, compared to the National Labor Relations Act, make the unionization of workers more difficult.

Recently, the question of how significant 'trade union organizing campaigns' are has been a bone of contention within the American trade union movement. This issue was one of the main reasons why the current president of the American Federation of Labor – Congress of Industrial Organisations (AFL-CIO, trade union confederation of the United States), John Sweeney, was able to oust Lane Kirkland from the presidency of the AFL-CIO. And it is the background for this year's conflict, which has already led to some larger member organizations turning their back on the affiliation.

A picture similar to the situation in the USA can be observed in Mexico, another main location of manufacturing plants of the CM corporations on the North American continent. These plants are mainly located in the Maquiladoras in the north of Mexico and are rarely organized by unions; they are rather covered by so-called protection contracts (*contratos de protección*). In accordance with Mexican labour legislation, these contracts can be concluded by existing trade unions and the company management without the need for an employees' mandate. These contracts can even be negotiated before workers are employed – employees become 'compulsory members'. Democratic union structures at plant level as they exist in Europe are scarce in this region. In many cases employees do not even know about their membership to one of the existing union confederations. These 'protection contracts' are mostly signed by the CTM (Confederación de Trabajadores de México), a union that is closely linked to the PRI (Partido Revolucionario Institucional), the political party that has been in power in Mexico for decades.

Such corrupt 'quasi-unions' negatively affect Mexican workers' perceptions of trade unions. Consequently, authentic grass-roots democratic union organizations have difficulties winning the confidence of workers.

Furthermore, plants in the Maquiladoras operate with a high proportion of temporary workers. Sometimes, according to the aforementioned CAFOD report, the entire workforce of a manufacturing plant comes from temporary employment companies. These workers often have short-term contracts and can be put under massive pressure because of the permanent fear that their contracts might not be renewed. Mexican legislation does not permit such a high proportion of temporary workers. However, neither the national government nor the responsible authorities seem to be disturbed by this and there do not seem to be any workers who are ready to appear before the labour court.

The situation in Europe is different as plants of the CM industry are unionized. Quite often, these plants were bought by other companies and there had been a trade union presence before the takeover. Our experience is that unions and interest representations at plant level, such as the works councils in Germany, are accepted during a transitional period. After a few years, however, pressure is often put on the workforce in order to weaken the unions or to shove them out of the factories. In any case, the companies of the CM industry often try to get rid of the binding effect of national and regional collective agreements and try to regulate wages and working conditions at plant level. However, this is not as easy to achieve as it is in the USA, where unions can be kept out of the factories in general. In 'Old Europe', the large computer makers such

as IBM, Hewlett Packard, Microsoft, etc., are unionized, although not to the same extent as companies in the steel or automotive industry. This is partly due to the fact that these companies mainly employ white-collar workers instead of traditional blue-collar workers.

Eastern Europe, which, due to its low wages, has recently become one of the CM industry's favourite locations in Europe shows a mixed picture. In some countries, the plants of this industry are in fact organized. But here, too, it can be observed that unions are hardly present in newly founded factories, but do exist in those that have been taken over by other companies.

In Eastern Europe, workers' experiences of trade unions under the communist system are quite often an obstacle to trade union organization. Without scrutinizing this experience, workers often perceive all unions to be the same, even those that did not exist during the communist era.

In Southeast Asia, trade unions are present in a number of CM factories. However, many Southeast Asian countries pursue latent anti-union policies that have been enshrined in restrictive laws and regulations.

In Malaysia, for example, unions must register at a government authority. This authority also defines the allocation of factories to a certain industrial sector. In the electronics sector, unions are permitted at plant level but not at national level. Companies in the electronics industry therefore have no difficulty in 'getting rid' of a national union by applying to be allocated to the 'electronics sector'. Furthermore, Japanese corporations, which are mainly present in this region, strongly support company unions as they are 'more closely related to the interests of the company and the plant' than nationally organized unions.

In South Korea, corporations are partly organized, but there are two union confederations that do not cooperate very closely. To date, Samsung has even managed to prevent the founding of unions at its factories.

In Japan, the system of company unions is predominant. Some of these company unions are affiliated to the national electrical electronic and information union, Denki Rengo, but not all of them by far. Most of the company unions at Sony are not yet affiliated to Denki Rengo.

Many trade unions in the ICT industry are affiliated to the International Metalworkers' Federation (IMF), based in Geneva, Switzerland. A number of white-collar unions, however, are affiliated to another Global Union Federation (GUF), the United Networks International (UNI). To date, there is no pronounced cooperation between the IMF and UNI in the ICT industry and, in particular, in the companies of this sector.

Finally, China is an important base for the hardware industry in particular and thus for many CM companies. 'Free trade unions' are not allowed in China. There is a union confederation, the ACFTU (All Chinese Federation of Trade Unions), which is closely linked to the governing communist party. This confederation has been involved in the objectives of the Chinese government's industrial policy. Industrial development takes absolute priority over a consistent representation of workers' interests. This is why low wages, poor health and safety conditions, etc., have prevailed in spite of the economic boom.

From a global point of view, the rate of unionization in the electronics industry is relatively low compared to the so-called 'old' industries. The reasons for this are manifold: governments that prohibit or at least obstruct the unionization of these

workers; the establishment of industries in Free Trade Zones, where unions are denied access; massive intimidation by the employers. These are all facets of anti-union policies of governments and companies. The frequent use of fixed-term contracts and the extensive use of temporary employment agencies are further reasons for the difficulties in organizing workers.

In fairness, however, it must be added that in a number of countries, the policies of some trade unions and their political involvement gives the impression that they do not really represent workers' interests in a consistent and successful way.

Trade Union Organizing: New Concepts Required

The formulas and strategies that used to be implemented to organize the large mass factories of the 'old' industries must at least be adapted to the conditions of the ICT sector. Better still, a variety of new strategies need to be developed in order to address the different groups of employees (temporary workers in the CM factories, white-collar workers in the software and services sectors, etc.) who often have no union 'background'.

A result of one strategy that has already been pursued is the negotiation of codes of conduct for transnational corporations, referred to as International Framework Agreements (IFA) by the trade unions.

International Framework Agreements Guarantee Fundamental Social Rights

IFAs are not a direct tool for organizing workers. However, they can be a means of improving the conditions of collective workers' representation by creating an environment in which unionization is possible without reprisals, disadvantages or discrimination. Nonetheless, they are far from being a blank cheque. Employees must still actively affiliate themselves to existing unions or establish new ones. Existing unions must in turn develop organizing strategies and launch appropriate activities. This might even include a change in union structures in order to become more attractive for the respective workers or groups of workers.

The tool of IFAs has been on the union agenda for quite some time. These agreements are concluded voluntarily between the management of a transnational corporation and a GUF.

One of these GUFs is the IMF, which comprises some 200 member organizations in the metal sector (e.g. metal processing, shipbuilding, automobile industry, engineering, aerospace industry), representing roughly 25 million employees world-wide.

By signing an IFA, the management of a corporation commits itself to a certain conduct. IFAs are based on the core labour standards of the International Labour Organization (ILO), a sub-organization of the United Nations. These core labour standards include the freedom of association, that is, the right of a worker to join a trade union or to establish one; the right to conclude collective agreements; the ban on child labour, the ban on forced labour and the right to gender equality at the workplace. The core labour standards are enshrined in the ILO Conventions which have been ratified by many countries. However, in many cases they have not been implemented in national legislation; they are disregarded or even actively violated.

Another point that the IMF considers an obligatory part of the agreement is the so-called suppliers' clause. This implies that corporations must see to it that the working conditions of their suppliers comply with the core labour standards or that these companies sign their own IFA.

In addition to the core labour standards there are often certain statements on minimum standards for wages, working hours, health and safety, etc. However, these are often not very specific as there is no international binding standard such as, for example, the core labour standards.

Such a code of conduct is rounded off by a clause on monitoring, that is, the control of the implementation of the IFA as well as regulations on how to treat complaints on the violation of the agreement.

To date, 40 transnational corporations have concluded such an IFA with the responsible GUF, 13 of which have been concluded with the IMF in the metal industry. These are predominantly European. Only one USA corporation and not a single Japanese multinational are represented so far.

In the metal industry, these companies are mainly auto makers or auto suppliers. Electronics corporations do not yet belong to the circle of contractual partners. It is possible that such an IFA might soon be concluded with a German electronics corporation. Recently, this corporation signed an additional agreement – in connection with a collective agreement on working hours – in which the management explicitly declares it will respect the ILO core labour standards and implement them in the corporation.

Many companies find it difficult to consider a voluntary agreement that commits them to respecting social human rights, and thus core labour standards, and to guarantee that these rights are respected at the workplace.

In reality, these fundamental social rights are trampled upon, not only in developing countries but also in the industrialized world – and workers who want to defend themselves collectively by establishing or joining a union are sanctioned. Many governments and government authorities still pass rules that support companies or turn a blind eye if a company violates labour legislation. This is the only way to explain the conditions and developments in the factories of contract manufacturers in Mexico and China, as described by the CAFOD report.

It must be stated that many workers are still intimidated and do not sufficiently defend for their own rights, not even if they are protected by labour legislation. Even inhumane working conditions are tolerated for fear of repression and job loss.

Not all unions are convinced about IFAs or implement them in their daily activities. This is not only because of the negative attitude of corporations, but also because of the lack of pressure and support provided by the respective national union confederations. These confederations seem to misjudge the fact that an IFA not only has an impact on the working conditions at plant level in developing and newly industrialized countries, but can also improve the conditions in industrialized countries. American 'union busting' will no longer be possible in a corporation that has concluded an IFA as this would be a clear violation of ILO Convention 87 on the freedom of association, which is one of the core labour standards.

There is a specific reason why GUFs attach such great importance to independent IFAs: companies voluntarily commit themselves to respect specific norms. In contrast to that, a number of internal company codes or rules of conduct has emerged similar to the ones formulated by the ILO, the Organisation for Economic Cooperation

and Development (OECD), or by the Global Compact of the United Nations. These codes, however, are generally formulated as a recommendation and not as a company's commitment to a specific conduct. They talk about 'efforts' and 'endeavours' to respect rules of conduct, but not about guaranteeing them. Furthermore, the internal rules of conduct of many transnational corporations completely leave out the freedom of association and the right to conclude collective agreements. IFAs do not have these weak points. Thus, they are the top priority for many GUFs on their list of policies towards transnational corporations.

In order to implement IFAs sustainably, new strategies should be discussed and put into practice – also in cooperation with non-governmental organizations (NGOs) and other organizations.

In principle, IFAs have little to do with the day-to-day business of trade unions, such as collective bargaining or health and safety. They define internationally accepted fundamental social rights.

Should 'positive publicity' directed at consumers be given to certain companies and their products if the producer has concluded an IFA and is implementing it properly? With respect to suppliers whose products do not reach the end consumer directly, recommendations could be made to consumers to favour products with components of suppliers who have signed an IFA. Positive publicity is easier to handle – particularly due to the still limited number of existing IFAs – than the opposite: negative publicity, that is, campaigns and calls for a boycott of certain products. This measure should be reserved, however, for particularly severe violations of international social standards.

New Organizing Strategies Needed

The most crucial organizing strategies are the activities of the unions: they must target the workers of a plant and convince them to join a union and to represent their interests jointly towards the employer.

On the political level, nationally and internationally, unions must increase their efforts to achieve global recognition of core labour standards in international agreements (including trade agreements) and their complete and unrestricted implementation and transformation in national legislation.

For this 'lobbying' there are partners to be found at all levels. Cooperation with NGOs must be intensified. At the same time, attempts should be made to transform the existing rules of conduct for international corporations (OECD, ILO and the UN-Global Compact) from non-committal declarations of intent into binding regulations. Until then, priority should be

given to the conclusion of more IFAs.

Cooperation, however, is not only necessary on the level of 'big politics', but it must also work on a smaller scale, at plant level and when trying to convince workers of the need for unionization. To increase their scope of action, unions must no longer shy away from cooperating with human rights organizations, feminist groups, environmental organizations and other NGOs. Close cooperation with these organizations can improve the chances of successful unionization, particularly if the workforce of a contract manufacturer mainly consists of women and ethnic minorities, for example in southern USA.

To help these groups of workers participate in a union organization in a better and more democratic way, union structures will have to be modified to some extent.

Cooperation with human rights groups serves this purpose almost perfectly. After all, the freedom of association and the right to conclude collective agreements are fundamental social rights. Fundamental human rights must not stop at the factory gates; close cooperation therefore benefits both sides. Fundamental social rights cannot prosper in an environment where human rights are disregarded and oppressed.

The same applies to cooperation with environmental groups. Environmental protection is necessary both inside and outside of factories. If enterprises succeed in reducing the use of dangerous substances, or even manage to eliminate them from products and the production process, this will also have a positive impact on environmental pollution outside company premises. This holds true for non-polluting waste disposal or the recycling of ICT products, which benefits the population, the workers and their trade unions. Waste disposal and recycling in particular are at sixes and sevens in many countries. While in Europe, legislative action has been taken by passing the EU Directive on Waste Electrical and Electronic Equipment, and in Japan recycling systems are also being built up, this question does not seem to be of great interest in the USA. So far, little has been heard about legislative initiatives. At a meeting of an IMF working group, a representative of an American union described the handling of electronic equipment in the United States as 'landfill', that is, old electronic equipment and components are 'buried', or sent to India as 'donations', where recyclable materials are melted out without the involved workers knowing what kinds of materials and compounds they are dealing with and what kind of impact this might have if handled in an inappropriate way (Jaeggi, 2003).

It is necessary to develop a strategy for the ICT sector, not only on a national but also, and especially, on an international level. First

approaches have been developed by the IMF and enhanced by a task force consisting of representatives of the major member organizations.

Within the framework of such a strategy it might be worthwhile developing and carrying out internationally coordinated organizing campaigns in specific companies. Companies that already or still have a union representation should be targeted. Here, European Works Councils that must be set up according to European law could play an important role.

An internationally coordinated organizing campaign in all manufacturing plants of a company would have the advantage of attracting much more public attention than an ordinary campaign at a factory somewhere in the world. In most cases, this kind of activity remains almost unnoticed and gives employers opportunities to react by threatening to shift production or by laying off workers.

In order to carry out such an international operation successfully, participating unions must commit themselves to an action plan. So far, this has only been possible to a limited degree for such a plan also means that certain competencies must be assigned to the respective GUF.

To do so, a number of conditions must be created: agreements should prevent the competition of several unions for the same staff. It may also be necessary to found new unions as workers sometimes do not regard existing organizations as potential candidates of interest representation.

In many countries, the fragmentation of the union landscape is one of the obstacles that has so far complicated effective international union cooperation, as the problems of national competition are often shifted to the international level. Looking at the potential and the need to represent

the interests of ICT employees collectively, however, a much closer and more target-oriented cooperation is necessary. Many ICT employees do not appreciate the competition among national unions and GUFs.

National union structures are another stumbling block for successful international union work. Sometimes local workers' representatives are not involved in international activities and structures, even though they are unionized. This complicates the work of the so-called world company councils, which are international union bodies of a transnational corporation. These world company councils have the task of forming union cooperation structures within the corporation in order to gather information, pass on information and develop common strategies.

So far, there are only three world group works councils, that is, global employee representations, that are established on the basis of an agreement with the management of a transnational corporation: at the two

German auto makers Volkswagen and DaimlerChrysler and at the Swedish roller bearing producer SKF. With respect to structure, intensity of cooperation between unions and employee representatives and information provided by the management, Volkswagen is probably the most advanced model. It is the aim of the IMF to achieve the establishment of other bodies of this kind on the basis of an agreement with the management, as these bodies can decisively help to internationalize trade union cooperation.

Lastly, 'international thinking and doing' must be incorporated into the day-to-day work of unions and their members, and, in particular, union officials. Trade union education policy can decisively contribute to achieving this aim if it is incorporated into teaching programmes and seminars. This process must not be restricted to the highest levels. Without involving union representatives at company level as well as the 'ordinary' member, international cooperation will often remain 'superficial' and nothing but an alibi.

Conclusions

In the metal sector, the electronics industry probably has one of the lowest rates of unionization. This explains the degrading working conditions that are described in the aforementioned CAFOD report. It is essential to introduce labour and social standards to the manufacturing of ICT products and components.

In this era of globalization, many companies, not only those in the computer or CM sector, operate on a global scale – they are 'global players'. Trade unions still operate mainly at national level, even if they are affiliated to international trade union organizations. Successful trade union policies, particularly those concerning the organizing of workers in factories, must

go back to their roots, that is, the plant level. Transnational coordination is nonetheless required for the sustainable representation of workers' interests in transnational corporations.

In the next few years, the establishment of such structures will gain more and more significance. In order to achieve this, trade unions must also find allies and partners in political circles and in the public realm, both nationally and internationally. A number of international organizations and NGOs pursue the same interests – a fact that should facilitate such cooperation. Many of us, however, will have to 'jump over our own shadow'.

Table 1: Codes of Conduct/Framework Agreements* Concluded between Transnational Companies and GUFs

Company	Employees**	Country	Branch	GUF	Year
Danone	100,000	France	Food Processing	IUF	1988
Accor	147,000	France	Hotels	IUF	1995
IKEA ***	84,000	Sweden	Furniture	IFBWW	1998
Statoil	16,000	Norway	Oil	ICEM	1998
Faber-Castell	6,000	Germany	Office Materials	IFBWW	1999
Freudenberg	27,500	Germany	Chemical	ICEM	2000
Hochtief	37,000	Germany	Construction	IFBWW	2000
Carrefour	383,000	France	Retail	UNI	2001
Chiquita	26,000	USA	Agriculture	IUF	2001
OTE Telecom	18,500	Greece	Telecommunication	UNI	2001
Skanska	79,000	Sweden	Construction	IFBWW	2001
Telefonica	161,500	Spain	Telecommunication	UNI	2001
Merloni	20,000	Italy	Metal	IMF	2002
Endesa	13,600	Spain	Power	ICEM	2002
Ballast Nedam	7,800	Netherlands	Construction	IFBWW	2002
Fonterra	20,000	New Zealand	Dairy	IUF	2002
Volkswagen	325,000	Germany	Auto	IMF	2002
Norske Skog	11,000	Norway	Paper	ICEM	2002
AngloGold	64,900	South Africa	Mining	ICEM	2002
DaimlerChrysler	372,500	Germany	Auto	IMF	2002
Eni	70,000	Italy	Energy	ICEM	2002
Leoni	18,000	Germany	Electrical/Automotive	IMF	2003
ISS	280,000	Denmark	Building Cleaning & Maintenance	UNI	2003
GEA	14,000	Germany	Engineering	IMF	2003
SKF	39,000	Sweden	Ball Bearing	IMF	2003
Rheinmetall	25,950	Germany	Defence/Automotive/ Electronics	IMF	2003
H&M	40,000	Sweden	Retail	UNI	2004
Bosch	225,900	Germany	Automotive/Electronics	IMF	2004
Prym	4,000	Germany	Metal Manufacturing	IMF	2004
SCA	46,000	Sweden	Paper	ICEM	2004
Lukoil	150,000	Russia	Energy/Oil	ICEM	2004
Renault	130,700	France	Auto	IMF	2004
Impregilo	13,000	Italy	Construction	IFBWW	2004
EDF	167,000	France	Energy	ICEM / PSI	2005
Rhodia	20,000	France	Chemical	ICEM	2005
Veidekke	5,000	Norway	Construction	IFBWW	2005
BMW	106,000	Germany	Auto	IMF	2005
EADS	110,000	Netherlands	Aerospace	IMF	2005
Gebr. Röchling	8,000	Germany	Auto Supply	IMF	2005
Schwan-Stabilo	3,000	Germany	Writing Material	IFBWW	2005
Lafarge Group	77,000	France	Building Materials	IFBWW/ ICEM/WFBW	2005
Arcelor	95,000	Luxembourg	Steel	IMF	2005
Total employees covered	**3,580,650**				

Note: Sorted by year of concluding/signing the agreement
Source: © Robert Steiert (IMF)/Marion Hellmann (IFBWW), 2005

* Some GUF's call the agreements 'Framework Agreements' not Codes of Conduct because only a few principles had been fixed in the first agreement, which were often extended by additional agreements. For instance, in the case of Danone, the first agreement of 1988 has been developed by six other agreements.

** The employee figures are mainly taken from the official company websites. The overview shows the number of employees who are directly employed by this company. Some agreements also have effects on franchising, sub-contracting companies and suppliers in the supply chain. In these cases, the number of people affected by the agreement is of course higher.

*** The IKEA agreement covers also the suppliers to IKEA and the whole supply chain as well as the IKEA-owned Swedwood Group. Alltogether about 1,000,000 employees might be covered.

In addition to the IFAs listed above there are agreements between the European Metalworkers Federation (EMF) and General Motors Europe as well as Ford of Europe. These agreements contain the core labour standards as well but are only valid for the European plants of General Motors (Opel) and Ford of Europe.

Key

ICEM	International Federation of Chemical, Energy, Mine and General Workers Unions
IFBWW	International Federation of Building and Woodworkers
IUF	International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations
IMF	International Metalworkers' Federation
PSI	Public Services International
UNI	Union Network International

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China's Potential Impact on Electronics Workers in Southeast Asia

Rajah Rasiah*

Introduction

Electronics multinationals became a pillar of development policy in a number of developing economies in the 1960s, 1970s and 1980s following the decomposition of the value chain involving electronics manufacturing, and as it led to the emergence of a range of new industrial species, for example telecommunications, computers and the Internet. The focus on the relocation of labour-intensive low wage operations to host sites endowed with large reserves of literate labour, fairly good infrastructure (at least in export-processing zones), reliable bureaucratic coordination and political stability attracted large-scale operations to East and Southeast Asia (e.g. Singapore, Malaysia, China, Thailand, the Philippines and Indonesia) and Latin America (Mexico, Barbados and Puerto Rico). Domestic and regional markets were also instrumental in the expansion of the industry in Brazil, Mexico and South Africa. India has only managed to expand in software operations where employment levels are low. Labour-reserve economies saw electronics multinationals as a major vehicle for creating employment initially and subsequently as a conduit for quickening learning and innovation directly (intra-industry spillovers) and indirectly (through diffusion to other industries). Some countries made foreign direct investment central by developing export-processing zones, for example, Singapore, Malaysia, Thailand, Mexico and Indonesia. Others used electronics multinationals indirectly as a mechanism for learning through imitation, licensing, subcontract arrangements and the hiring of personnel embodying tacit knowledge accumulated in electronics multinationals, for example Korea and Taiwan. Nevertheless, in countries that have managed to appropriate technological synergies – learning, upgrading and diffusion to local firms – such strategies can be found firmly embedded in long-term development policies. Brazil represents an eclectic approach where both strategies have been used without coherence.

In Southeast Asia, the electronics industry heralded manufactured export expansion in Singapore (since the late 1960s), Malaysia (since the early 1970s), Thailand (since the 1980s), Philippines (since the late 1990s) and Indonesia (since the late 1990s). Rapid expansion helped raise employment levels in the industry in all the economies. Out of all these economies, Singapore has managed to upgrade significantly and hence the remaining electronics firms pay relatively high wages. Given the nature of operations (low value-added) and the notoriety of the industry in opposing unions, electronics manufacturing expansion in the remaining Southeast Asian economies has also raised serious concerns over the quality and permanency of jobs in the industry. These latter questions have become even more intense since China's integration into the world economy.

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China's expansion in global trade and investment flows is not a new phenomenon. Since rapprochement with the United States of America (USA) in the 1970s, economic transition has stimulated export expansion and inward foreign direct investment (FDI) flows to China. The communist regime has carefully managed integration into the capitalist system, making it the world's chief exporter of labour-intensive goods such as garments. Hence, China's entry into the World Trade Organization (WTO) is unlikely to generate a sudden splash and with that a massive shake-up in global trade and investment flows. Despite the end of the Multi-Fiber Agreement (MFA), which expired at the end of 2004, garment exports from China to the developed economies have grown slower than expected owing to the requirement under WTO that such restructuring must be handled without serious injury to the domestic economies importing garments. Yet, with its massive labour force, China by far poses the largest threat to labour-intensive exporters (including electronics goods) in Southeast Asia. Its large labour force, low wages and agglomeration economies make China a far more attractive site for FDI too.

The increased competition to export and attract FDI could heighten pressures to race to the bottom in the Southeast Asian economies. Low wages and poor labour standards are already applying pressure to Southeast Asian labour markets. Governments – responding to the interests of firms – could adopt short-term strategies to tighten controls on trade unions in order to compete with exports from China and to slow down wage growth. In addition, contrary to claims, even when approving sanctions on the powerful nations, developing economies have had more deleterious effects than the developed under the WTO owing to the asymmetric capacity to enforce and absorb retaliatory measures.

This paper examines the impact of China on electronics workers in Southeast Asia. The analytic framework used is first presented, and then China's potential impact on valued added and exports, FDI, and information and communications technology (ICT) and research and development (R&D) infrastructure in Southeast Asia is looked at, and the implications of this for labour markets in general and electronics workers in particular are examined before conclusions are drawn.

Analytic Framework

It is extremely difficult to estimate the impact of China's integration into the world economy on Southeast Asia's electronics industry. Hence, this paper uses second best methods by deploying selected proxies to examine its impact on electronics workers in Southeast Asia. The use of historical data has both its strengths and weaknesses. Its strengths include the projections that could be made to comprehend the potential economic consequences of greater integration. The limitations include the

potential diversions to projected growth that can be expected from policy shifts as well as random factors.[1] Nevertheless, this approach seems to be the most plausible for evaluating the impact of China on Southeast Asian labour markets as it forms the prime basis for projecting the future.[2]

The paper examines China's impact first by evaluating comparatively the effects of greater integration involving production, trade, FDI flows and institutional support.

1 See Popper (1995) for a lucid explication of the limitations of history in understanding the future.
2 Popper (1957) to some extent also misunderstood the rationale behind Marx's analysis of historical materialism to explain the emergence of class societies.

These variables will definitely have a bearing on the future of the electronics industry in Southeast Asia. The paper subsequently looks at the impact of these variables on Southeast Asian electronics workers. Because employment absorption, unemployment rates and wages are conditioned often at the level of the overall labour market, they are discussed on a national scale.

The four proxies examined here are electronics exports, FDI flows, investments in R&D and wage differences. The size and technological structure of manufacturing value-added is evaluated here so as to show trend shifts in the structure of production in these economies. Manufactured exports are examined at the aggregate level, including technological structure and shares of critical exports in world markets. This proxy is a better indicator of what to expect when greater integration in global markets takes place. FDI flows – both the overall shares and its relative intensity in gross fixed capital formation – give an indication of China's likely impact on the FDI dependent economies of Southeast Asia. Investment in R&D as a share of GDP offers a comparative assessment of institutional support for upgrading in industrial firms – domestic and foreign-owned – in the region.

Finally, the implications of China's greater integration in world and regional markets are examined from observed shifts in trade, FDI flows and institutional support facilities for Southeast Asian workers. The size of the labour force of the countries involved, employment size and elasticity, unemployment rates, labour productivity, wages and unit labour costs, trade unions and labour standards will have a strong bearing on both static competitiveness and impact.

China and Southeast Asia Compared

Southeast Asia as a whole had 36.6 per cent and 71.1 per cent of China's 1.25 billion population and GDP, respectively, in 1999,[3] making it vulnerable to greater trade and investment liberalization, particularly involving labour-intensive economic activities – both low and high technology. China's per capita income in 1995 prices of US$769 in 1999 was much higher than that of Cambodia, Vietnam, Myanmar and Laos, and was only slightly lower than that of Indonesia and the Philippines.

Increased markets from integration can benefit regional specialization based on the economic law of comparative advantage. On the one hand it offers complementarity potential for a regional division of labour to support differentiated inter-country exports and to a smaller extent expand export demand. On the other hand, China's massive labour force and export manufacturing capability will provide stiff competition for Southeast Asian exports and FDI inflows. Much of the manufacturing value-added generated in Southeast Asia competes with industries in China. In addition, Southeast Asian economies are not positioned above China in the learning curve for electronics assembly. Hence, China's further integration could cause some hollowing out in Southeast Asia. However, China is already considerably integrated into global markets and hence greater integration is not going to suddenly cause chaos in Southeast Asian economic activities. Besides, given labour market and bureaucratic rigidities and safety clauses contained in trade agreements to avert economic calamities, Southeast Asia's industries are unlikely to evaporate suddenly.

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3   Computed from World Development Indicators, World Bank (2001).

This section compares the important economic conditions of China and Southeast Asia. The first part examines the structure of manufacturing value-added, the second looks at the export structure, the third evaluates FDI flows and the fourth infrastructure support facilities.

Manufacturing Value-added

China's manufacturing value-added in the combined region increased steadily in the 1990s to its peak of 75.9 per cent in 1998 (see Figure 1). The expansion was particularly rapid in the 1990s when China became more integrated in export markets. The sheer size of China's manufacturing value-added, which has grown significantly faster than any of the Southeast Asian economies in the 1990s, presents significant economic implications for the latter. In addition to economies of scale and scope, China enjoys united command for launching complex economic activities that can out-compete similar but fragmented operations in Southeast Asia. China's manufacturing structure would benefit from greater differentiation and division of labour than Southeast Asia's under its unified bureaucratic regulation.

China's manufacturing value-added structure is largely comprised of medium and high technology products, albeit confined to lower value-added segments of value chains. Singapore enjoys greater specialization in such products with stronger participation in design operations. Among the remaining Southeast Asian economies only Malaysia compares favourably with China. Indonesia, Malaysia, Thailand and the Philippines made significantly greater progress in upgrading than China in the period 1985-1997, but the absolute size of China's operations leaves these gains relatively small. Cambodia, Laos, Myanmar and Vietnam have a much smaller share of medium and high tech products in manufacturing value-added. This can be seen from the technological content of manufactured exports (see next section), which is the more important basis of comparison for cross-border movement of products. The slow increase in product upgrading within manufacturing value-added in China compared to the Southeast Asian economies is also a reflection of its size as well as massive FDI inflows involving the latter following the Plaza Accord of 1985 and the withdrawal of the Generalized System of Preferences (GSP) from the Asian newly industrializing economies (NIEs) in February 1988. Given China's gigantic size, its export share alone – where upgrading has taken place extensively – could place competitive pressures on Southeast Asia. China's greater integration with Southeast Asia would of course offer room for import penetration from Southeast Asia. However, that would depend on the capabilities of these economies to take advantage of the opportunities. This will be difficult as the industrial structures of most of these countries are similar to China's. Only Singapore's economy appears favourably placed in higher value-added activities, but even that advantage could be wiped out given China's size and developmental efforts.

The slow upgrading in manufacturing value-added may suggest that China did not restructure significantly in the period 1985-1997, thereby offering Southeast Asian economies considerable room to reorganize industrially. While this may well be the bigger picture of China's manufacturing sector, faster restructuring involving its manufactured exports will have a serious impact.

Figure 1: China's Share of Combined Manufacturing Value-Added, 1990-1999

Source: Computed from UNSTATS-ILO (2001)
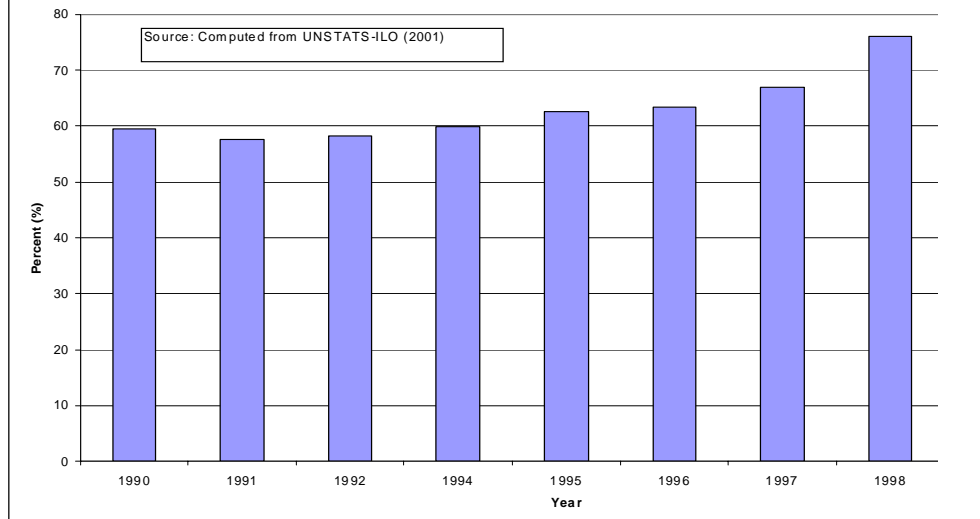
Exports

Southeast Asian economies managed to sustain rapid long term growth through export expansion, particularly manufactured exports, from the early 1970s in the case of Singapore and Malaysia, the 1980s in the case of Thailand and Indonesia, and the 1990s in the case of the Philippines, Vietnam and Cambodia. While competition for inward-oriented industries is likely to rise, the biggest threat China poses in electronics manufacturing is in export markets. The fundamental question facing many Southeast Asian governments is whether China's integration into the global economy has negatively affected exports from Southeast Asia. In short, has the entry of a whale into a slowly growing pool left a smaller space for Southeast Asian mackerel to swim?

Southeast Asia's overall exports was 4.6 times that of China in current US dollar terms in 1970, rising to a peak of 6.4 times in 1978 (see Figure 2). Economic transition and rapid manufacturing expansion in China has seen this figure fall dramatically to 1.1 times in 1998. While the ratio rose slightly again in 1999, the abolition of MFAs, the

removal of actionable subsidies and quotas, and the lowering of tariffs is expected to raise China's exports further. China fared even better in manufactured exports. Southeast Asia's manufactured export ratio with China was 1.4 in 1984, rising to its peak of 3.1 in 1993 (see Figure 3). However, the ratio fell sharply to 0.9 in 1999. The relative expansion in China's manufacturing exports from 1993 also exemplifies China's rising export competitiveness against its decline in relation to Southeast Asia in this period.

Electronics exports from China and the Southeast Asian economies (with the exception of the Philippines, the exports of which remained at a nominal US$39 billion) grew in this period (see Figure 3). While exports from Indonesia expanded from a tiny base of US$1 billion in 1999 to US$65 billion in 2003, the commensurate growth in the other economies was not as impressive as China's. Despite a large starting base of US$221 billion in 1999, electronics exports in China more than doubled to US$487 billion in 2003 (see Figure 3). Obviously the pressure is there.

Figure 2:   China's Share of Combined Exports, 1970–1999
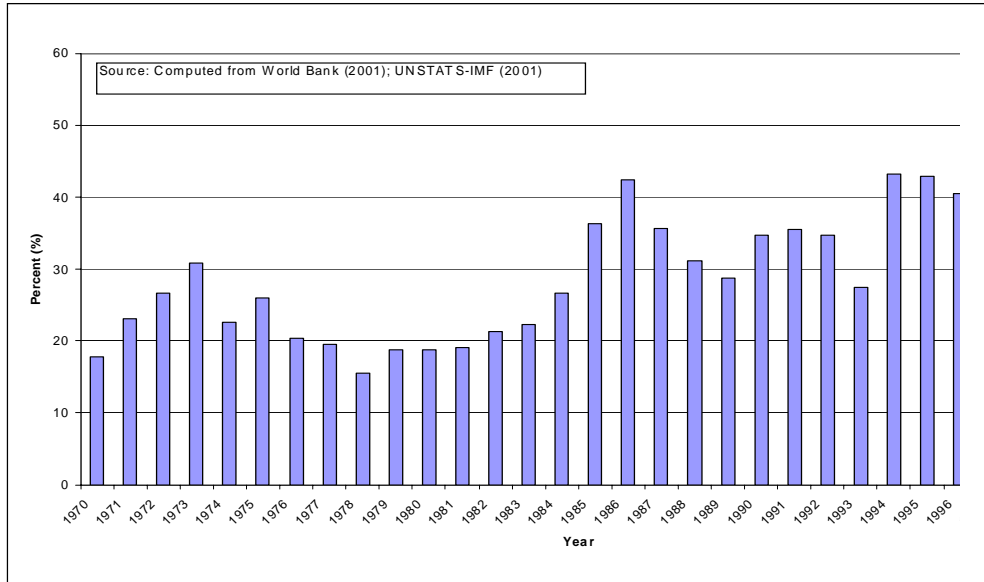
Figure 3:   Electronics Exports, China and Southeast Asia, 1999 and 2003
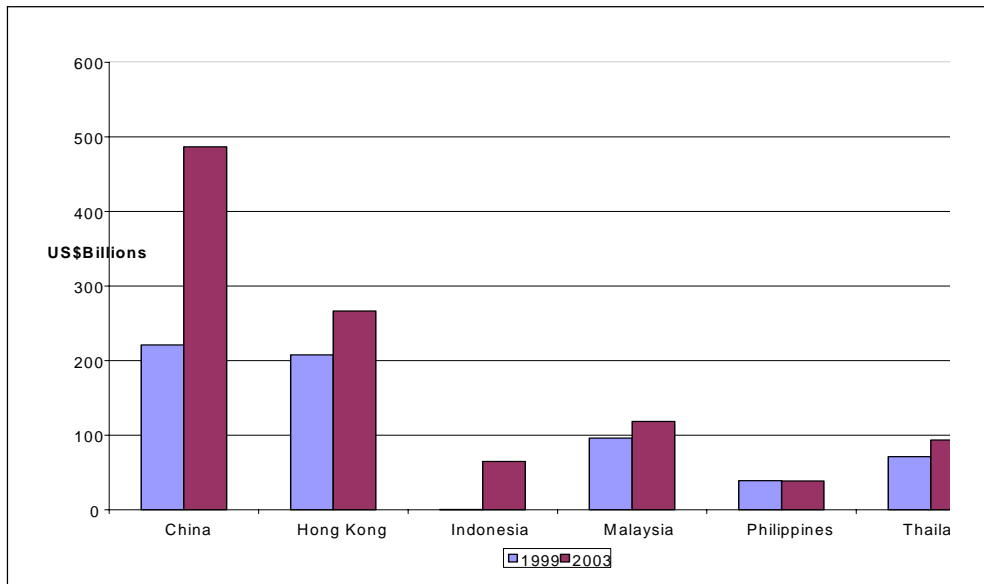
Unless the Southeast Asian economies upgrade it is very likely that electronics firms will increasingly relocate to China. This point is reinforced by the rising technological content of manufactured exports from China (see Table 1). The new tigers in Southeast Asia have kept their lead over China in the share of high tech products. Singapore is the only exception in Southeast Asia, but its tiny size is unlikely

to stop China's expansion. What Table 2 shows is that China and the Southeast Asian market economies have expanded their share of high tech products in total exports. However, it also shows that China has experienced far higher growth than its Southeast Asian neighbours. China also leads in the export of several medium tech items. For example, China exported over 20 and 12 per cent of the world's radio receivers and clocks and watches, respectively, in 1998 (Lall and Albadejeho, 2001). Given the reliance of Southeast Asian firms on foreign R&D support – whether by foreign affiliates or local companies (through licensing) – it would not cost much for firms to relocate to China to take advantage of China's large and cheap labour force.

Table 1: Manufactured Export Structure, 1985 and 1998

	1985				1998				Average annual growth rates (1985-1998)			
	HT	**MT**	**LT**	**RB**	**HT**	**MT**	**LT**	**RB**	**HT**	**MT**	**LT**	**RB**
China	**5.2**	**12.2**	**43.7**	**38.8**	**20.0**	**20.2**	**50.0**	**9.9**	**43.2**	**34.2**	**30.5**	**16.2**
Thailand	4.7	22.0	35.4	37.9	34.8	20.5	25.3	19.3	41.4	20.6	18.2	15.1
Malaysia	26.9	11.4	8.0	53.7	52.1	20.3	11.0	16.7	23.0	22.2	19.8	6.9
Indonesia	3.0	6.4	15.5	75.2	9.7	18.5	33.0	38.8	27.2	26.0	23.1	10.4
Philippines	11.0	9.0	24.1	56.0	67.4	10.9	14.5	7.2	38.8	22.5	16.1	3.1
New Tigers	**10.2**	**12.2**	**25.3**	**52.3**	**36.8**	**18.1**	**26.8**	**18.4**	**28.0**	**22.2**	**19.3**	**9.2**
Hong Kong	14.8	19.1	63.0	3.2	26.0	13.2	56.3	4.5	7.5	0.0	2.0	5.7
Korea	12.8	37.2	41.4	8.6	29.8	38.5	21.0	10.7	19.1	11.9	5.9	13.5
Singapore	24.5	23.4	8.6	43.5	60.2	18.7	7.0	14.1	22.1	12.0	12.1	4.5
Taiwan	16.2	21.1	52.9	9.9	36.6	27.5	30.4	5.5	17.6	12.7	5.8	5.5
Mature Tigers	17.1	25.2	41.5	16.3	38.2	24.5	28.7	8.7	18.7	11.3	5.4	7.1
East Asia ex. China	**13.6**	**18.7**	**33.4**	**34.3**	**37.5**	**21.3**	**27.7**	**13.5**	**20.8**	**12.8**	**7.6**	**8.0**

Source: Extracted from Lall and Albaladejo (2001: Table 4).

The significance of China's exports over those of Southeast Asia also becomes obvious from Table 2. Southeast Asia's five new tigers enjoyed a market share of almost three times that of China in 1985. However, as China's manufactured exports expanded sharply in the 1990s, its overall export share became equal to the new tigers in 1998. China accounted for 17 per cent of manufactured exports from the developing economies in 1998, making it the largest among them. Electronics products dominate the high tech segment. This is a dramatic rise from the 3.1 per cent it accounted for in 1985 (Lall and Albaladejo, 2001). While China still lags behind Singapore in high technology, its expansion rate suggests that it will not take long before it surpasses the latter. China's grip on low technology raises considerable concerns for Indonesia, the Philippines and the transitional economies of Cambodia, Laos, Myanmar and Vietnam. China already has a healthy lead in world export market shares in six of the nine important electronics products over Southeast Asia's chief electronics exporter, Malaysia (see Figure 4).

China's high tech exports grew by 43.2 per cent per annum on average between the

years 1985-1998 (see Table 1). Using past rates, Lall and Albaladejo (2001) calculated that China's high tech exports would reach US$201 billion in 2003, far exceeding the highest Asian NIE (Singapore) figure of US$168 billion. The faster growth of Chinese industries over Southeast Asia's also means that incomes in the former are rising faster to expand effective demand. The rise in incomes coupled with extensive restructuring should gradually reduce the export-intensity of output involving China so that much of the imports and exports will be sourced domestically in the long run.

Table 2: World Market Share of Manufactured Exports, 1985 and 1998

	1985					1998				
	Total	**HT**	**MT**	**LT**	**RB**	**Total**	**HT**	**MT**	**LT**	**RB**
China	**0.5**	**0.1**	**0.1**	**1.1**	**0.8**	**3.9**	**3.1**	**2.0**	**10.4**	**2.2**
Thailand	0.3	0.1	0.2	0.5	0.5	1.0	1.5	0.6	1.4	1.2
Malaysia	0.7	1.1	0.2	0.3	1.5	1.5	3.2	0.8	0.9	1.5
Indonesia	0.3	0.1	0.0	0.2	1.0	0.6	0.2	0.3	1.1	1.4
Philippines	0.2	0.1	0.0	0.2	0.4	0.7	1.8	0.2	0.5	0.3
New Tigers	1.4	1.3	0.4	1.3	3.4	3.9	6.7	1.8	3.9	4.3
Hong Kong	1.2	1.1	0.6	4.2	0.2	0.5	0.6	0.2	1.6	0.1
Korea	2.3	1.7	2.1	5.0	0.8	2.8	3.4	2.8	3.1	1.7
Singapore	1.5	2.2	0.8	0.7	2.7	2.4	5.8	1.2	0.9	2.0
Taiwan	2.3	2.2	1.2	6.4	0.9	2.5	3.6	1.8	4.0	0.8
Mature Tigers	7.2	7.1	4.6	16.3	4.6	8.2	13.3	5.9	9.6	4.6
East Asia ex. China	8.7	8.4	5.1	17.6	8.0	12.1	20.0	7.7	13.6	8.9

Source: Extracted from Lall and Albaladejo (2001: Table 5).

Figure 4: World Market Share of Electronics Products, China and Malaysia, 1997
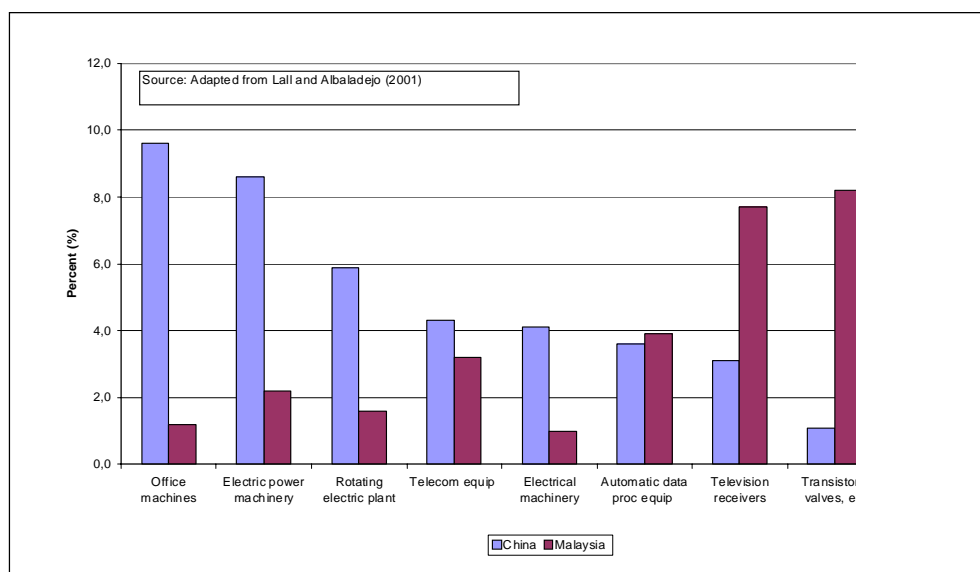
FDI Flows

China became the largest recipient of FDI among developing economies in the 1990s. Arguments about the potential for greater cross border inter-industry linkages may not hold because of major differences in wages, infrastructure support and structural interdependence. In the presence of a united common market of China and Southeast Asia, it is possible to imagine the spread of FDI across borders. However, a European Union-style monetary union between these economies does not look possible, at least in the near future, and given China's labour force, much of the differentiation and division of labour in the combined region could be confined to its own borders.

As shown in Figure 5, China only accounted for 6.5 per cent of the combined net FDI inflows to the region in 1982. This figure rose sharply to 69.7 per cent in 1999. Both the sheer size and the rapid increase in the overall FDI flows to the region suggests that China is indeed a major threat to Southeast Asia. The removal of the MFA and direct and freer trade would make China's labour force even more attractive for labour-intensive and low technology FDI. Interviews show that several firms either relocated completely or shifted significant assembly operations from Malaysia to China (especially American and European firms) and Thailand (especially Japanese firms).

Figure 5: China's Share of Net FDI Inflows as a Combined Total, 1982–1999
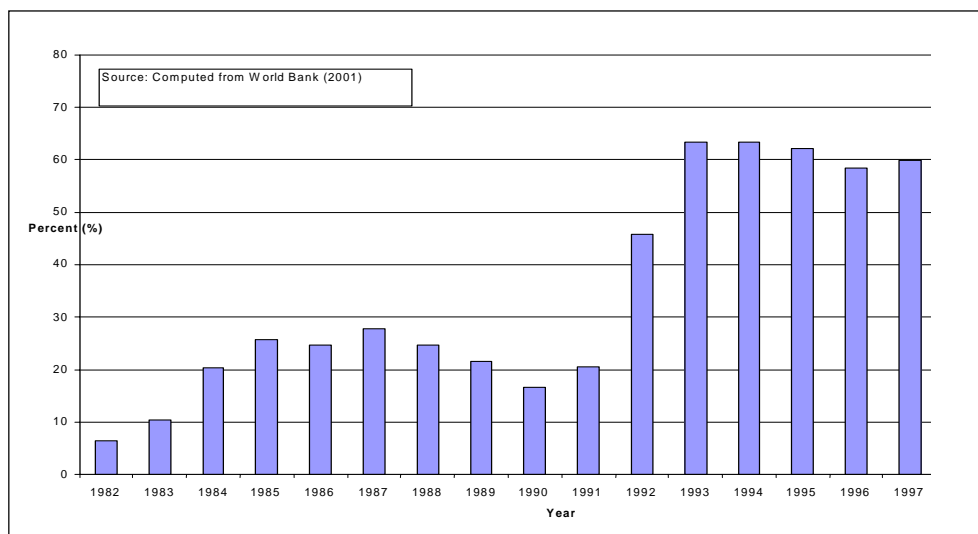
While China accounts for much of the FDI, it is not the most FDI-dependent economy in the region. The high share of domestic investment acts as a catalyst to attract more FDI inflows to China. As a proportion of gross fixed capital formation (GFCF), FDI reached its peak of 15.1 per cent in 1994 before contracting gradually to 10.5 per cent in 1999 (see Table 3).

Indonesia faced a negative share in the late 1990s following the political explosion that accompanied the financial crisis, while Malaysia – traditionally strong on FDI – had a lower share of FDI in GFCF in the late 1990s caused primarily by exhaustion in labour reserves and the contagion from the financial crisis. For both political and economic reasons Indonesia and Malaysia

appear less attractive for large-scale electronics FDI inflows in the near future. Cambodia, Thailand, Laos and Vietnam became more FDI-dependent than China in the 1990s. Thailand faced a higher rise in net FDI inflows in the late 1990s as a consequence of a sharp depreciation in assets from the financial crisis and capital flight. In fact, interviews with Japanese electronics firms suggest that Thailand alone has figured as the major production alternative for China. The transitional economies were able to attract labour-intensive low-wage manufacturing activities in the late 1990s. Singapore has always relied strongly on FDI. These developments suggest that China enjoys greater leverage to attract more FDI than its Southeast Asian neighbours and hence may divert scarce capital from employing more labour.

Table 3: Net FDI Flows, 1970–1999

	1970	1975	1980	1985	1990	1995	1999
Cambodia	0.00				0.00	23.54	
China	0.00	0.00	0.00	1.44	2.83	12.54	10.52
Indonesia	5.43	6.26	0.96	1.27	3.11	6.73	-8.13
Malaysia	9.85	14.07	12.36	7.96	16.38	10.78	8.83
Lao PDR				0.00		20.81	
Philippines	-1.75	2.13	-1.12	0.25	4.95	8.88	4.03
Singapore		12.89	22.76	13.92	41.50	24.99	25.10
Thailand	2.37	0.55	2.01	1.49	6.92	2.97	23.83
Vietnam					1.91	42.85	22.07

Source: Computed from World Bank (2001).

ICT and R&D Infrastructure

In light of the pressure China's integration has brought, a major way out for Southeast Asian economies is to stimulate upgrading into higher value-added activities. It has been argued that China will not be able to attract high-tech investment and compete in higher value-added export markets because of its specialization in labour-intensive low technology activities. However, while labour-intensive Southeast Asian economies with weak infrastructure, such as the transitional economies of the Philippines and Indonesia, will come under tremendous pressure, China's build-up in basic and R&D infrastructure suggests that the others will not be spared either. Figures 6, 7 and 8 locate China's comparative strength in R&D and ICT infrastructure against the Southeast Asian economies. It can be seen that only Singapore, Malaysia and Thailand seem to have an advantage over China in ICT. Singapore, Malaysia and Thailand also show an edge over China in R&D investment as a share of GDP. Since China's figures are divided over a far larger GDP and much of the R&D activity is concentrated in a smaller part of China, it can be argued that its R&D support is potentially far more potent than that of Malaysia and Indonesia.

It can be seen that China's greater integration in global markets is likely to create wide ramifications for the Southeast Asian economies. China's greater integration and its consequent effect on industrial relocation has been conspicuous since the late 1980s. China's enormous size and

similarity of manufactured exports structure, as well as its continued success in attracting inward FDI could pose serious problems for Southeast Asian economies. The rapid upgrading of manufactured exports and expansion in infrastructure – ICT and R&D – means that even technologically superior Singapore may not be spared. The implications are likely to be most profound in tradeable industries.
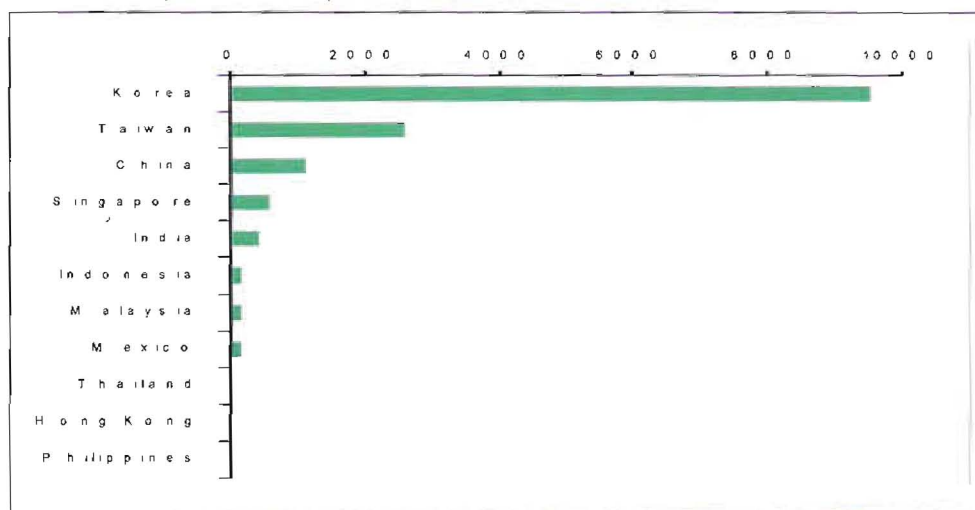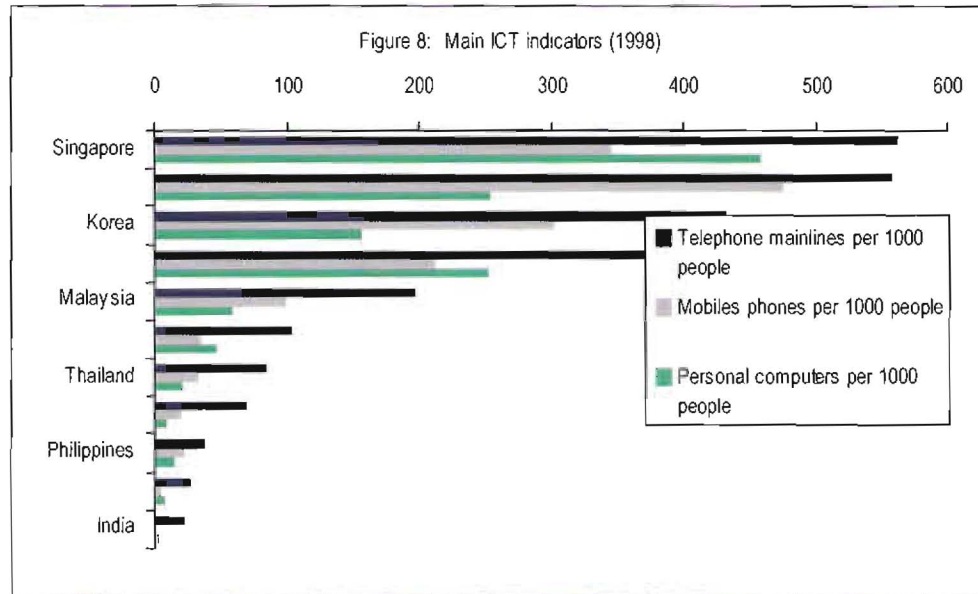
Figure 6: R&D Spending/$1,000 and MHT MVA, 1998
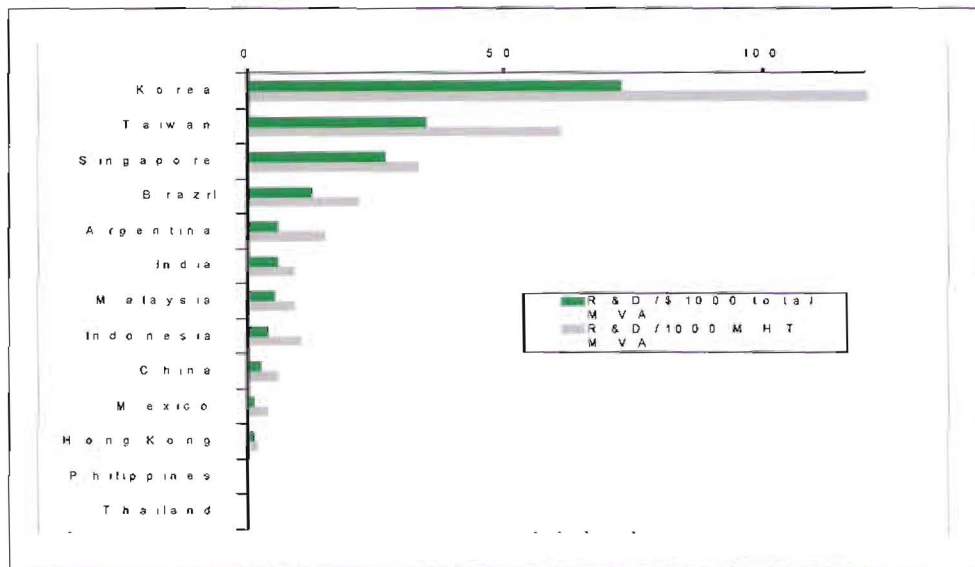
Figure 7: Total R&D Financed by Productive Enterprises in 1998 (US$ million)

Figure 8:   Main ICT Indicators (1998)

Figure 8:   Main ICT indicators (1998)

0	100	200	300	400	500	600

Singapore
Korea
Malaysia
Thailand
Philippines
India

■ Telephone mainlines per 1000 people

  Mobiles phones per 1000 people

■ Personal computers per 1000 people

Source: World Bank, WIDR 2001. Reproduced from Lall and Albaladejo (2003).

Implications for Southeast Asian Electronics Workers

The previous section established the competitive threat posed by China to Southeast Asia in general and electronics manufacturing in particular. The pressure has already been felt as several labour-intensive and knowledge-intensive electronics firms have relocated to China from Indonesia, Malaysia, Thailand, the Philippines and Singapore since the late 1990s.[4] However, Southeast Asian economies have also demonstrated their versatility in adapting to crises – especially the extremely strong trade dependent Singapore, Malaysia and Thailand – with industrial restructuring helping to overcome downswings. However, only Singapore has managed to regulate restructuring without significantly impoverishing its workers. This section sets out the implications for Southeast Asia. It focuses on China's capacity to absorb further economic expansion and what that could mean for labour markets and electronics workers in Southeast Asia.

Employment and Unemployment

China's labour force grew much more slowly than Southeast Asia's over the period 1960-1999, but still accounted for 75 per cent of the region's combined total in 1999 (see Figure 9). China's new addition to the labour force accounted for 56.7 per cent of the addition to the combined region in 1999. This huge share could apply more pressure on Southeast Asia as greater integration in world and regional markets would attract more exports and FDI inflows. China's surge in attracting FDI inflows and export manufactures since the 1990s to some extent came at the expense of Southeast Asia. With greater integration, China's labour force and lower wages would
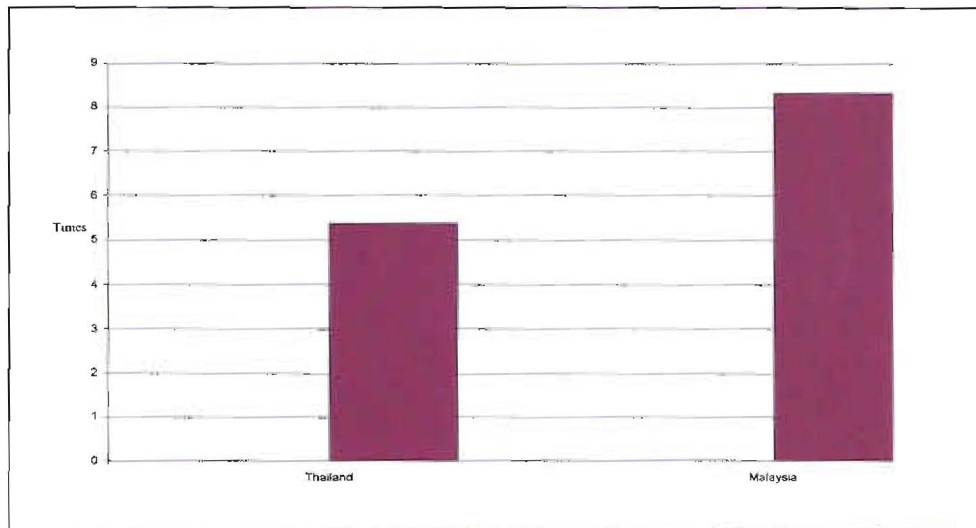
4. Author interviews (2001-2002).

have a greater bearing on industrial growth in Southeast Asia. China's massive labour force and low wages would discourage FDI outflows.

Table 4 shows the composirion of economies in the combined labonr force in tbe period 1960-1999. China's industrial structure could pull indusrries away from the middle wage economies of Malaysia, Thailand and the Philippines. In facr, the Philippines faced no growth in even nominal electronics exports in rhe period 1999-2003 (see Figure 3). Singapore has a tiny labour force, but irs focus on shifting to high value-added acriviries has ro some extent shielded it against competition from China. However, agglomeration economics, sustained growth in science and technology institutions and cheaper production costs has attracted even some high-tech operarions to China.

Lall and Albaladejo (2001) reporr that overall manufacrnring wages in the Philippines was 5.4 rimes that in China in 1997. Wages in Singapore, Malaysia and Thailand are higher srill. Broken by low-tech and high-tech industries, the differential between 1997 wages in China, Malaysia and Thailand was also enormons. While Chinese wages have grown faster rhan most Southeast Asian economies, rhe gap is still huge. For example, average wages in the electronics and transporr equipmenr indusrry in China was less rhan five rimes that of Thailand and less rhan eight times thar of Malaysia in 1997 (see Figure 9). Only tbe transitional economies of Myanmar, Laos, Cambodia and Vietnam are expected to have lower wages compared ro the prime manufacturing locations in China. It is little wonder thar the relocarion of electronics firms from Malaysia, Thailand and the Philippines ro China was reported in 2001 and 2002.[5]

Figure 9: Wage Differentials in Electronics and Transport Equipment, China versus Malaysia and Thailand, 1997

Source: Adapted from Lall and Albaladejo (2001).

5. Author interviews (2001-2002).

Table 4: Composition of the Combined Labour Force, 1960–1999 (%)

	1960	1965	1970	1975	1980	1985	1990	1995	1999
Brunei	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cambodia	0.63	0.66	0.65	0.60	0.53	0.53	0.54	0.58	0.61
China	78.22	77.57	77.92	77.98	77.50	77.01	76.69	75.82	74.99
Indonesia	8.17	8.38	8.24	8.21	8.43	8.72	8.93	9.43	9.92
Malaysia	0.63	0.68	0.69	0.71	0.76	0.78	0.81	0.87	0.93
Myanmar	2.49	2.56	2.52	2.46	2.47	2.46	2.38	2.36	2.38
Laos	0.26	0.26	0.26	0.25	0.24	0.23	0.23	0.23	0.24
Philippines	2.35	2.52	2.58	2.63	2.71	2.78	2.78	2.96	3.11
Singapore	0.12	0.13	0.13	0.15	0.16	0.17	0.18	0.19	0.19
Thailand	2.99	3.17	3.20	3.33	3.51	3.58	3.62	3.65	3.63
Vietnam	4.14	4.05	3.78	3.67	3.69	3.72	3.83	3.90	3.97

Source: Computed from World Bank (2001).

Table 5: Unemployment Rates, 1980–1998

	1980	1985	1990	1995	1998
China	4.9	1.8	2.5	2.9	3.1
Indonesia	1.7	2.1	2.5	7.2	5.5
Malaysia	5.6	6.9	5.1	2.8	4.9
Philippines	4.8	6.1	8.1	8.4	9.6
Singapore	3.0	4.1	1.7	2.7	3.2
Thailand	0.8	3.7	2.2	1.1	3.4

Source: World Bank (2001)

Unemployment data on developing economies is generally unreliable. Moreover, given that the definition of employed refers to people working for an hour or more a week and because of the absence of unemployed welfare benefits, unemployment figures in developing economies are generally higher than reported official figures. Despite having the world's largest labour force, China only had an unemployment rate of 3.1 per cent in 1998 (see Table 5). Underemployment rates may be more useful but the paucity of data makes analysis difficult. It is believed that between 45 and 55 per cent of the labour force in Indonesia and Philippines was underemployed in 1998.[6] While the Asian financial meltdown in the late 1990s pushed up unemployment rates throughout East and Southeast Asia (see Rasiah, 1998), the increased integration of China in the world market and the slow pace of technical change in the Southeast Asian economies had already left Indonesia, Malaysia, the Philippines and Thailand in a precarious position even before the currency crisis

6. Author interviews conducted for the FES in Jakarta and Manila in February 1998.

erupted. Unemployment rates in Indonesia, Malaysia, the Philippines and Thailand rose following the financial crisis in the late 1990s. Unless a coherent strategy is worked out, full-scale integration is likely to undermine employment rates in these economies. Cambodia, Laos, Myanmar and Vietnam could manage to retain some labour-intensive industries. Because of their underdeveloped status and high levels of underemployment, cut-throat competition in labour markets could pressure a fall in real wages in these economies.

Labour Productivity

Productivity differentials are one critical indicator of competitiveness that will have a strong bearing on industrial restructuring in the combined region. While differences in industrial specialization will continue to sustain growth and subsequent trade based on comparative advantages even under circumstances of productivity differentials, the similar composition of China's industrial sectors with Southeast Asia suggests that it will have a strong bearing.

With the exception of the transitional economies, the enormous resource rents and participation in higher value-added activities gave the remaining Southeast Asian economies an enormous lead in labour productivity (see Table 6). However from about 1980, upgrading and structural change following increasing integration in the global economy has helped China to continuously close the gap. Labour productivity grew faster in China in the period 1990-1995 and 1995-1999 than in any of the Southeast Asian economies (see Table 7).

Table 6: Labour Productivity Differentials, 1960–1999

	1960	1965	1970	1975	1980	1985	1990	1995	1999
Brunei				251.3	267.8	117.8	74.5	42.0	NA
Cambodia							0.8	0.5	0.4
China	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indonesia	3.0	3.2	3.4	3.8	4.2	3.2	3.0	2.3	1.6
Malaysia	13.3	16.6	17.2	18.2	19.5	14.6	13.4	11.1	8.6
Laos							1.3	1.1	0.8	0.7
Philippines	8.7	10.3	9.7	9.8	9.8	5.3	4.6	2.7	2.1
Singapore	38.4	47.0	66.8	74.4	78.3	59.3	59.4	49.0	41.3
Thailand	4.3	5.6	6.7	6.6	7.0	5.3	6.0	5.0	3.5
Vietnam							0.8	0.7	0.6	0.5

Note: Figure measured by [Y/Li][Y/Lc]-1 where Y, L, i and c refer to GDP, Labour force, country i and China, respectively.
Source: Computed from World Bank (2001)

Southeast Asian wages could stagnate, especially in labour-intensive electronics assemblies (e.g. PCBs, transistors and electrical appliances). This will not help firms in Malaysia, Thailand, the Philippines and Indonesia in the long run as they lack the literate labour force to compete with China. These economies should instead

engender the conditions for upgrading to higher value-added activities through training, skills development and R&D activities. A stronger role for responsible unions that ensures fair wage rises will also be important to apply supply side pressures for firms to upgrade. Economic development is about improving living standards rather than keep them low to compete with low cost sites.

Table 7: Labour Productivity Growth, 1960–1999 (%)

	1960-1965	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-1999
Brunei				4.7	-8.0	-4.0	-1.5	NA
Cambodia							2.9	0.7
China	-0.8	2.7	2.2	3.3	8.4	5.3	10.5	7.2
Indonesia	0.1	4.1	4.9	5.1	2.5	4.2	4.9	-2.9
Malaysia	3.7	3.4	3.4	4.9	2.2	3.5	6.4	0.5
Laos						2.3	4.1	3.9
Philippines	2.4	1.6	2.4	3.2	-4.0	2.3	-0.7	0.7
Singapore	3.3	10.2	4.4	4.4	2.5	5.3	6.3	2.7
Thailand	4.5	6.4	2.0	4.6	2.6	7.6	6.6	-1.8
Vietnam						1.7	6.1	5.2

Note: Figures refer to average annual growth rates using GDP in 1995 US dollars.
Source: Computed from World Bank (2001).

Manufacturing Wages and Unit Labour Costs

It has often been argued that wages are a major factor explaining labour-intensive inward FDI flows to developing economies. However, unit labour cost is a better instrument to denote competitiveness, albeit more effective if comparisons are made between like industries. Using average Singaporean monthly wages as the base, Table 8 shows the share of average manufacturing wages of China, Hong Kong, India, Malaysia, Myanmar (only by gender breakdown), the Philippines and Thailand. Data for Cambodia, Laos and Vietnam were not available. Singapore wages remained higher than those of the combined region. China's average monthly wage was only comparable to that of India, although China's sustained rapid growth has resulted in its wages outstripping India's from 1992. However, China's wage rate remains much lower than those of the Southeast Asian economies in Table 8. With the exception of the period 1980-1987, China's average wage grew strongly in 1987-1990 and 1990-1993, but its manufacturing labour productivity grew much more in both periods (see Table 9).

Southeast Asia performed better when the more important variable, that is, unit labour cost, is compared in the earlier years of 1987-1990 but not thereafter (see Figure 10). Manufacturing unit labour costs in China exceeded those of Malaysia, the Philippines, Singapore and Thailand in the period 1988-1990. While China's superiority in unit labour costs is much less and only exceeded that of Malaysia, the Philippines and Singapore from 1991, it shows a trend fall after 1989 (see Table 8). Even though

Thailand has continuously performed better than China in the period 1989-1994, the gap has consistently narrowed. China's unit labour costs declined in 1987-1990 and 1990-1993. Unit labour costs in the Southeast Asian economies – especially after 1990 – have fared worse than China's. If China maintains its greater increases in labour productivity compared to wage rise, it will put serious pressure on Southeast Asian labour markets. These developments suggest that China's greater integration in global and regional markets will raise competitive pressure on Southeast Asian labour markets.

Table 8: Manufacturing Wage Differentials, 1986–1997 (Singapore=100)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
China	6.9	6.6	7.2	7.0	4.7	4.0	4.1	4.3	3.2	NA	NA	NA
HK	91.2	95.8	94.9	94.7	89.7	86.2	81.9	83.3	79.2	70.8	70.0	74.5
India	15.8	13.9	11.9	8.1	7.3	5.1	3.5	2.9	2.3	2.5	NA	NA
Malaysia	55.0	51.9	42.7	37.1	31.7	29.1	30.1	29.3	27.1	26.2	NA	NA
Philippines	23.9	25.7	25.6	24.8	22.9	19.6	20.4	18.4	18.2	17.0	NA	NA
Singapore	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Thailand	22.3	NA	NA	18.3	17.0	16.1	15.2	14.5	12.9	13.2	13.2	11.7

Note: Monthly wages in national currencies converted to US dollars using year-end exchange rates.
Source: Computed from UNSTATS-ILO (2001).

Figure 10: Unit Labour Cost Comparisons, Manufacturing, 1987–1995
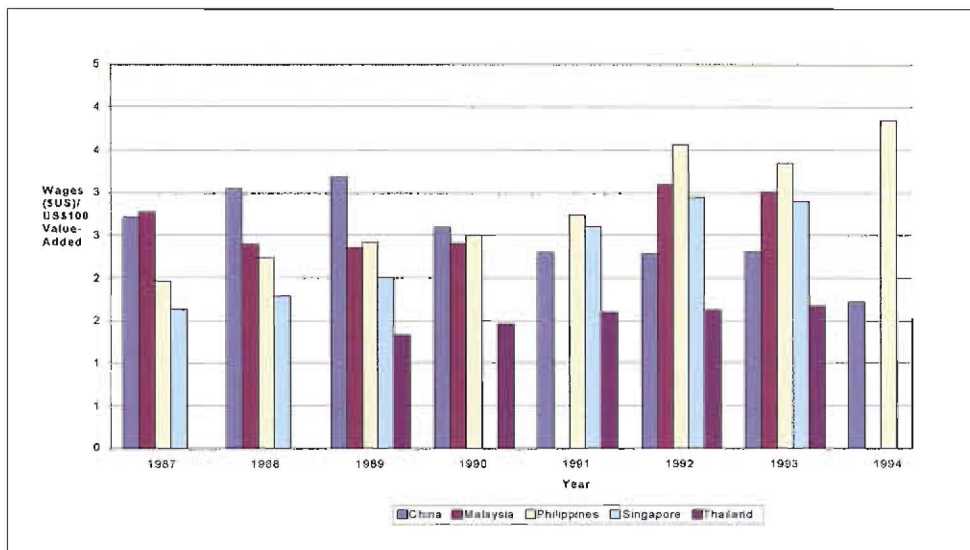
Source: Computed from UNSTATS-ILO (2001); World Bank (2001).

Table 9: Annual Average Growth in Monthly Manufacturing Wages, Value–Added and Unit Labour Costs, 1980–1997

	Wages/Employee				VA/Employee			Wages/VA		
	1980-1987	1987-1990	1990-1993	1993-1997	1987-1990	1990-1993	1993-1997	1987-1990	1990-1993	1993-1997
China	-4.4	4.7	9.9	NA	6.4	14.3	12.5	-1.2	-3.8	NA
Indonesia	NA	NA	NA	NA	1.8	5.9	3.5	NA	NA	NA
Malaysia	5.2	-0.7	10.5	10.1	4.2	2.6	8.6	-3.5	7.8	0.4
Philippines	1.1	12.7	5.4	11.9	3.8	-4.2	2.4	6.3	10.0	8.2
Singapore	NA	17.2	13.4	10.5	4.2	5.9	NA	5.4	5.6	NA
Thailand	8.4	7.0	7.6	4.7	7.2	3.0	4.9	-0.4	4.4	-0.2

Source: Computed from World Bank (2001); UNSTATS-ILO (2002).

Trade Unions and Labour Standards

The increased pressure on labour demand is likely to intensify competition with a consequent weakening of trade unions and downward spiral on wages in Southeast Asia. The impact on individual economies would be different because of the diversity of institutional arrangements involving trade unions and workers, and labour standards. Despite the generally stronger institutional participation by trade unions, the underdeveloped status and low-income levels in transitional economies has left labour standards generally poor. Even child labour is rampant in the transitional economies. Unless effective strategies are launched, these conditions may weaken in the initial phase as stronger competition is unleashed by greater integration.

Trade unions tend to enjoy greater representation in the transitional economies of China, and Vietnam owing to strong antecedents with the politburo. Laos, Myanmar and Cambodia lacked similar histories. Singapore has managed to integrate trade union involvement in the political process since 1969 and hence also enjoys strong union densities (Wong, 1998; Rasiah & Chua, 1998). Democratization of

the labour movement after the collapse of the Marcos regime did not produce a similar impact in the Philippines. Rivalry among trade unions has undermined their collective ability to participate effectively at the negotiating table with employers and the government. Indonesia is currently facing a similar process of democratization following the collapse of the Suharto regime, and showing a weakening of trade union institutions. Malaysia and Thailand – the latter despite considerable democratization since the late 1990s – have faced general exclusion from the political process.

Trade unions in Indonesia, Malaysia, the Philippines and Thailand are reporting pressure from multinational corporations to keep their activities down. There is already an increasing threat from these companies to relocate to China and Vietnam. In fact, these companies could also play one location against another to undermine trade union power and prevent efforts to improve labour standards. The lack of strong trade union representation and coordination between them has actually reduced many of them to passive rather

than active actors in the operations of multinational corporations. Only Singapore and to some extent Vietnam have managed to achieve stronger representation – facilitated by their active participation in the political process (see Rasiah & Chua, 1998).

Governments will be hard-pressed to contain trade union activity in countries such as Malaysia where the struggle of the Malaysian Trade Union Congress (MTUC) is still capped strongly. With a smoother integration in the political process, the National Trades Union Congress (NTUC) might intensify upgrading efforts in Singapore in addition to becoming even more selective in its immigration policies. The loose framework in the Philippines and Indonesia – where democratization has taken place without significant institutional development – may actually widen the gap in the already-created dual labour market (Rasiah & Chua, 1998). The informal low-wage and undefined labour market segment could expand leaving workers more vulnerable to the retrenchments that follow crises. Labour exports may intensify to overcome persistent unemployment from reaching high levels domestically. Overseas contract workers have contributed the major share of the GNP of the Philippines for a number of years now (Ofreneo, 1998). Indonesia has already experienced fast growth in workers seeking jobs abroad. Thailand could face similar pressures soon. However, given the constraints labour-importing economies in the region are currently facing (e.g. Singapore, Malaysia and Thailand), governments are likely to increase their already aggressive means of keeping illegal migration out.

In light of these developments, governments in Southeast Asia – especially in Malaysia, Thailand, the Philippines and Indonesia – must strengthen the institutional support for companies to upgrade to higher value-added activities. In addition, trade unions must be given a wider role to apply a fair, well-informed influence on raising wages commensurate with rising living as well as training costs, and the motivation necessary to stimulate upgrading. Because economic development requires improvement in living standards rather than competing on the basis of keeping wages low, governments in these economies should strengthen the instruments and institutions that encourage the achievement of the former and not the latter.

Greater integration of China with Southeast Asia could have wide ramifications for electronics workers in Southeast Asia. If greater integration enhances complementarities and structural interdependence with the effect of encouraging stronger industrial relations frameworks, it could stimulate a trend fall in unemployment and bring improvements in labour standards. However, the power asymmetry between institutions, location endowments and governments, and industry dynamics that favour agglomeration of production in particular locations is likely to intensify competition in final and intermediate product markets. The past suggests that China's labour productivity could soon overtake that of its neighbours. Governments in Southeast Asia could face greater pressure to prevent unemployment and underemployment from rising. Trade unions would be hard pressed to sustain membership and labour standards in the face of greater labour market disruptions.

Conclusions and Recommendations

It appears that China's greater integration into the global economy and markets would raise competitive pressure on Southeast Asian electronics workers. While China's huge domestic market – expected to expand strongly with rapid increases in per capita incomes – would increase effective demand, its large labour force and strong participation in a range of electronics industries suggest that it will be very difficult for Southeast Asian economies to take advantage of it. The transitional economies of Myanmar, Cambodia and Laos in particular lack the infrastructure to attract electronics industries on a mass scale. Vietnam has managed to attract some low value-added electronics activities but lacks the infrastructure to sustain rapid growth in this industry. The Philippines and Indonesia could face serious restructuring – especially the relocation of labour-intensive electronics to China and Vietnam. Malaysia and Thailand have good ICT infrastructure but lack sufficient institutional deepening to differentiate their industries from China's. The increasing focus on R&D in China suggests that these economies could face serious pressure to retain their electronics industries. The political tension between Japan and China seems to have discouraged Japanese electronics firms from targeting China extensively, hence providing Thailand with the opportunity to retain consumer electronics activities. Singapore is still favourably positioned to retain high-tech electronics activities. However, given China's sheer size and past rates of investment in R&D, production of scientists and engineers, and patenting, Singapore's advantage may not continue for long. These implications are unlikely to destroy the Southeast Asian economies as their resilience in past crises has demonstrated. Instead, the pressures are outlined to show that Southeast Asian economies will have to work hard to sustain improvements in their labour markets.

Efforts to sustain growth in the electronics industry and hence ensure that the industry continues to retain and create quality jobs for workers will require governments to strengthen the institutional support necessary to upgrade to higher value-added activities, and to provide greater institutional participation by trade unions to facilitate coordinated responses to production and trade demands. Governments in Southeast Asia should look to Singapore and formulate a coordination council to bring together the critical stakeholders in the electronics industry. In addition to firms, the government must invite representatives of institutions engaged in education, training, R&D (to start them if they do not exist), trade unions and infrastructure to formulate strategies to strengthen the industry. Clearly such strategies would require strengthening the high-tech infrastructure for firms to raise learning and innovation to move up the value chain. Southeast Asian economies must invest more in strengthening their human capital so that the increasing knowledge content enhances labour productivity and commensurate increases in wages offer the effective demand for engaging a wider spectrum of labour force in the region as a whole. The alternative would be to build particular niches to differentiate industrial specialization – either based on individual national strategies or collectively with two or more economies – to establish long-term comparative advantage over China and the rest of the world. Of course this will not be easy as China has the advantage of its enormous size to launch new products in almost every industry, which Southeast Asia plans to develop.

Such strategies should also mean that trade unions must be formally accepted as collaborative partners rather than 'enemies' as they are viewed by the management of companies and governments in some of

the Southeast Asian economies. Recognizing a national union in the industry is the first step towards obtaining electronics workers' meaningful participation in efforts to train, develop skills and innovate. Since wages and working conditions will be central to workers' concerns, wage increases should meet rising costs of living as well as productivity increments. Unless wages rise there will be no motivation for workers to learn and innovate, which will then ensure productivity increments to support the competitiveness of companies. Like governments, trade unions can also cooperate internationally to ensure that a minimum code of conduct can be achieved between China and the Southeast Asian economies.

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The Electronics Industry in China – Visible Success and the Real Price*

Sanjiv Pandita and Apo Leong

Introduction

Over the past two decades, China has emerged as the fastest growing economy in the world. With a steady economic growth rate of over 8 per cent, it has become a major manufacturing hub. Often described as the 'factory of the world', industrial production in China has reached unprecedented levels. China continues to attract more foreign direct investment (FDI) than any country in the world. Utilized FDI for 2002 stood at US$52.7 billion.

Hidden beneath the marvellous economic statistics are the millions of workers who work on the production lines of the various industries to make this miracle possible. With a population of about 1.28 billion, China is the most populous country in the world and thus has the largest working population in the world (about 700 million). The majority of the workforce is still engaged in agriculture, but the trend is changing fast with thousands of peasants moving out of rural areas to work in the manufacturing centres in the cities. The government estimates that nearly 100 million migrant workers from the rural areas work in the urban industrial cities, accounting for about 30 per cent of the industrial workforce. However, unofficial figures are much higher and according to Guo Wencai, director of the grass-roots Organization Department of the All-China Federation of Trade Unions (ACFTU),[1] 'The make-up of China's manufacturing workers has undergone great change. The number of farmers-turned-workers has surpassed that of workers in traditional terms, or those born in urban areas with household registration'. Most of these workers work in the private sector or foreign-funded enterprises and are often exploited by investors intent on deriving maximum profits. In sum, they do not get a fair share for their hard labour, and their labour rights are not truly respected. The same holds true for electronics workers.

Table 1 (over) shows China's major economic indicators.

Electronics Industry

The electronics industry has been identified as one of the pillars[2] of the Chinese economy. The information and electronics industry (IT) has seen phenomenal growth in China in the past decade. Presently China's information and electronics

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* This is an abbreviated version of Apo Leong and Sanjiv Pandita, '"Made in China": Electronics Workers in the World's Fastest Growing Economy', in Ted G. Smith, David A. Sonnenfeld and David N. Pellow (eds), *Challenging the Chip: Labor Rights and Environmental Justice in the Global Electronics Industry.* Philadelphia: Temple University Press, 2006 (forthcoming).

1. 'China's Farmers-Turned-Workers Outnumber Urban-born Counterparts', *People's Daily*, 19 December 2002.

2. Under the Ninth Five Year Plan, five industries were named as pillar industries. They include machinery, electronics, petroleum and chemicals.

industry, with total sales revenue of 1.88 trillion Yuan (US$227 billion) in 2003,[3] an increase of 34 per cent over the previous year, has attained the distinction of being the third largest in the world, next to the USA and Japan. No doubt it is referred to as the 'first pillar' of the national economy.

Table 1: China's Major Economic Indicators

Major Economic Indicators	2002		Jan to July 2003	
	Value	Growth (%)	Value	Growth (%)
Area (sq km, million)	9.6			
Population (million)	1,284.5			
Gross domestic product (RMB billion)	10,239.8	8.0	5,005.3	8.2
Urban per capita income (RMB)	7,703.0	13.4	4,301.0	8.4
Rural per capita income (RMB)	2,476.0	4.8	1,158.0	2.5
Value-added of industrial output (RMB billion)	3,148.2	12.6	2,177.3	16.4
Urban unemployment rate (%)	4.0			
Exports (US$ billion)	325.6	22.3	228.4	33.4
– by FIEs (US$ billion)	169.9	27.6	123.0	39.5
Imports (US$ billion)	295.2	21.2	222.3	42.9
– by FIEs (US$ billion)	160.3	27.4	121.1	45.8
Trade surplus (US$ billion)	30.4		6.1	
Foreign direct investment				
– number of new projects	34,171.0	30.7	22,245.0	19.3
– contracted amount (US$ billion)	82.8	19.6	59.9	32.5
– utilized amount (US$ billion)	52.7	12.5	34.3	24.8
Foreign currency reserves (US$ billion)	286.4	34.9	366.5	44.6

Source: Hong Kong Trade Development Council (2000).

Development of the Industry

The electronics industry in China dates back to the mid 1950s when China started to manufacture electronic products, mainly for defence purposes. This was the era when the Chinese economy relied heavily on central planning. In the first four Five Year Plans from 1953 to 1975, China's goals for the electronics industry were predominantly restricted to meet national strategic and defence needs. With the end of the Cultural Revolution in 1976, the national economy began to recover and the electronics industry went in a new direction. China introduced drastic economic reforms in the late 1970s, which set the precedent for the so-called 'socialist market economy' with Chinese characteristics. The setting up of four Special Economic Zones (SEZ) in 1980 followed. The phenomenon of economic zones has not stopped since then. In 1984 China opened its 14 coastal cities[4] for foreign investment and they functioned like SEZs. This was followed by 'economic and technological development zones' (ETDZs). ETDZs mainly attract hi-tech industries. They are supposed to provide

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3. *People's Daily*, 4 February 2004.
4. The cities are Dalian, Qinhuangdao, Tianjin, Yantai, Qingdao, Lianyungang, Nantong, Shanghai, Ningbo, Wenzhou, Fuzhou, Guangzhou, Zhanjiang and Beiha.

an environment for scientific research, technological development and production. At present there are 49 state level economic and technological development zones.

The electronics industry in China developed late compared to the rest of the manufacturing sector in China. Electronics imports greatly exceeded exports; in 1989 the ratio was 2 to 1. In the Eighth Five Year Plan (1991-1995), the electronics industry saw rapid development. The industry's key economic goals, set for the next five years, were achieved in just two years. By 1995, the volume of exports exceeded the input, with more and more surplus favourable to China.

The industry has not looked back since then and has developed into one of the leading electronics industries in the world. The domestic consumption of electronic products has also risen many fold. China has the largest number of mobile phone users in the world and PC shipments have grown to over 9 million. Tremendous growth in the consumption of electronic goods locally has led to international companies flocking to China in a bid to capture the domestic market. China has attained a unique position as a major producer and exporter as well as a major consumer of electronics goods.

Production Volume and Characteristics

It is projected that China's share of global electronics production will rise from 8.1 per cent to 14.3 per cent in 2005. By then, China's share of world electronics manufacturing will have nearly doubled, making it a hub for the IT industry, according to a recent World Bank study. Its growth rate has been three times higher than the GDP growth rate in the past decade (representing 24.2 per cent of the national GDP in 2001). The IT industry is the leading figure in the national industrial production, and occupies the number one position in the export industry (28 per cent of the national total). Electronics and IT production in China has grown more than 21-fold since 1989 (see Table 2).

Table 2: 1989 and 2001 IT Industry Indicators Compared

Indicator	1989	2001
Gross Output (RMB billion)	63.4	1357.0
Sales (RMB billion)	49.0	824.0
Profit (RMB billion)	3.7	48.0
Export (US$ billion)	2.76	65.0

Source: 2002-2003 IT Economic Situation and Future Development (2002).

The major share of IT production in China was at one time dominated by local enterprises, but this has now been overtaken by foreign enterprises and joint ventures. Based on available data for 2002, provided by the Chinese Ministry of Information Industry, foreign enterprises including enterprises from Macao, Hong Kong and Taiwan constituted about 68 per cent of total ownership.
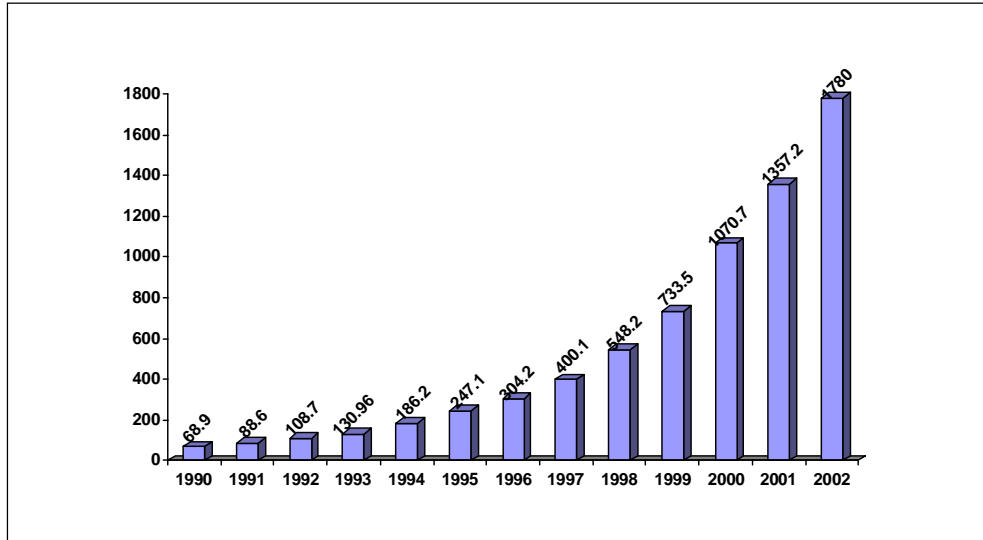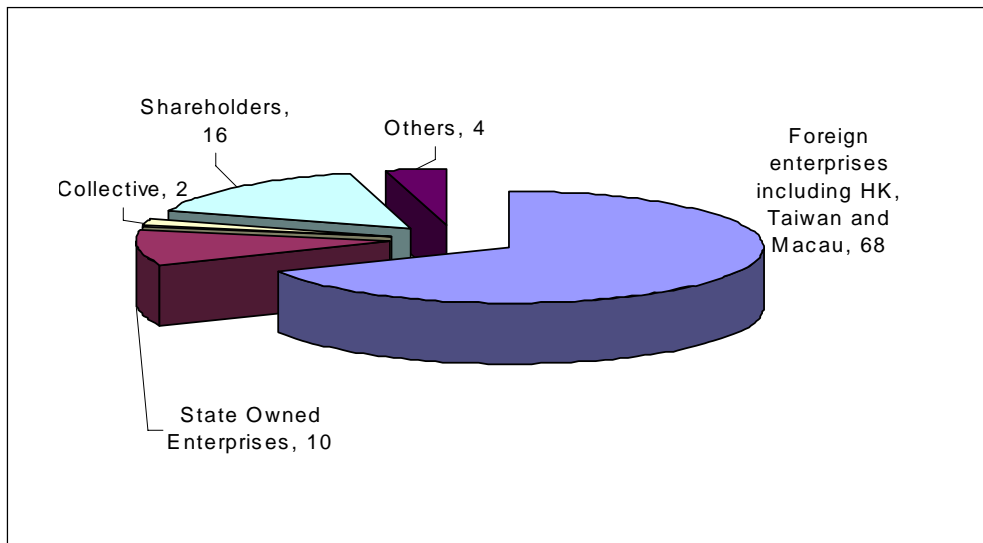
Figure 1: Gross IT Output in China (RMB billion)

Figure 2: Share of Different Types of Enterprises in China's IT Industry

In terms of product category, home appliances was the largest segment in 2002, accounting for about 28.7 per cent of total output. Prominent foreign invested enterprises in this section include JVC, Samsung, Matsushita, Kenwood and Philips. Some of the Chinese corporations in this field are Changhong, Konka, TCL, Panda, Haxin and Zhongshan Jiahua. The recent strategic alliance created between TCL and the French Thompson is illustrative of how ambitious both parties are in wanting to capture national and international markets. Together they form the world's largest maker of televisions, with an expected annual output of 18 million sets.
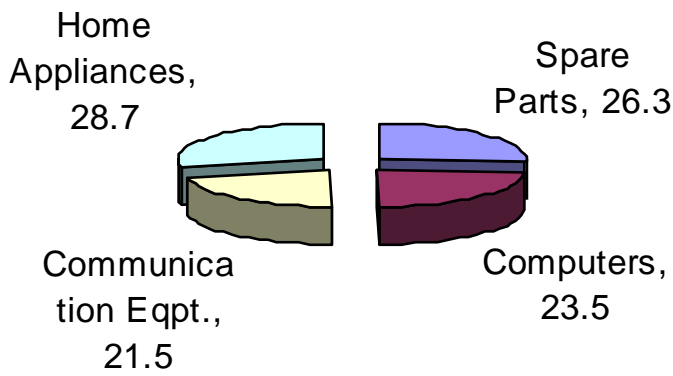
Figure 3:   Electronic Industry Breakdown (%)

Components or spare parts equipment is the second largest segment, constituting about 26.3 per cent of the total output in

Suzhou, a coastal city in Jiangsu province in east China has become the biggest laptop computer production centre in the world, ~~~output close to 10 million ~~~arter of the world's total. ~~~omputer companies in ~~~up factories in Suzhou, ~~~Compute Corporation, ~~~and Mitac International ~~~a Daily).

~~~equipment, with a total ~~~1.5 per cent constituted ~~~segment. Both local ~~~foreign enterprises, ~~~tures, are major players in the communications industry, including companies such as Motorola, Siemens, Matsushita, Nokia TCL-NEC, Ericsson, Fujitsu, Shanghai Bell Telecom, Shenzen Huawei Technology, Haxin, Beijing Telecommunication and Panda.

Many of these mega IT enterprises were built on technological capabilities accumulated during the planned economy period. There has also been growth in the number of foreign firms setting up operations in China. IBM, Compaq, Hewlett Packard, Dell, Acer, Toshiba, NEC, LG Electronics and Siemens have all built production facilities and R&D centres in China.

Industry Concentration

In terms of production regions, Pearl River Delta, Yangtze River Delta, Fujian and Bo Sea Bay regions are the four major players within Southern China where Guangdong functions as the economic dragon head. This is the largest production base and accounted for about 38 per cent of the industry total in 2002. Table 3 provides the regional output for electronics products in 2002.

Table 3: China's Electronic/IT Production by Region, 2002

Region	Production (%)
Central and southern China (includes Guangzhou)	38
Southwest China (includes Sichuan)	4
Northwest China (includes Shanxi)	2
Northern China (includes Beijing)	14
Northeast China (includes Dalian)	4
East China (includes Shanghai)	38

Source: Ministry of Information Industry, Government of China.

Exports

Exports are dominated by foreign investment companies. Total exports from the electronics sector stood at US$92 billion in 2002 (see Figure 4). According to government statistics, machinery and electronics products made up more than half of China's foreign trade in the first six months of 2003. Their combined import and export total rose 45.2 per cent year-on-year to US$194.49 billion, and much of it was dominated by foreign invested establishments.

The recent entry of the World Trade Organization (WTO) has accelerated growth as more and more transnational corporations (TNCs) aspire to exploit the cheap labour[6] and government incentives for international markets.

The Ministry of Commerce has released a list of the top 200 exporters for 2002, which was dominated by foreign companies, with the Taiwan-based computer parts maker, Honhai Electronics Foxconn taking the top spot with a record US$4.38 billion in exports.

Electronics and IT accounted for over one third of the top 200 export enterprises and about half of the top 20 export firms.

Employment Generation

It is very difficult to get a clear picture of employment generation due to conflicting figures and definitions from various bureaus. Some reports claim that 200,000 jobs were created in 2001, and the total electronics industry workforce was 3.26 million people or 6 per cent of the total industrial labour force (Ministry of Information Industry, 2003), while another report claims that 7 million jobs were created for related industries.

5. *China Daily*, 2 August 2003.

6. 'China's labor cost is nearly one fourth that of Korea or one twentieth that of US or Japan', *Economic Observer*, December 2003.

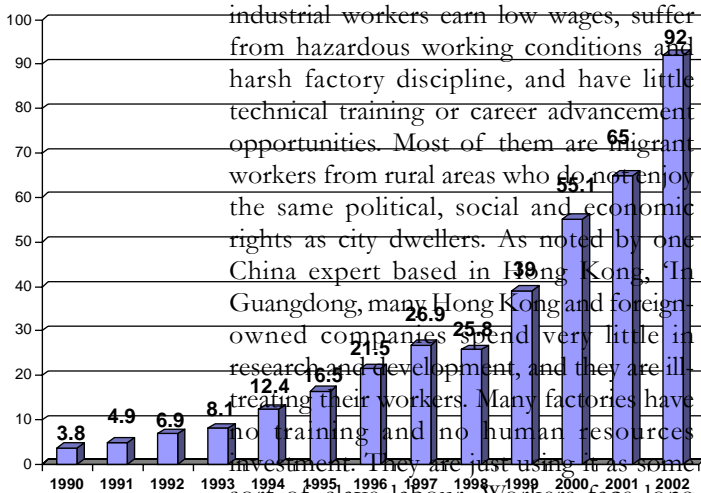Figure 4:   Growth of IT exports in China (US$ billion)

Working Conditions

The undeniable fact is that most IT industrial workers earn low wages, suffer from hazardous working conditions and harsh factory discipline, and have little technical training or career advancement opportunities. Most of them are migrant workers from rural areas who do not enjoy the same political, social and economic rights as city dwellers. As noted by one China expert based in Hong Kong, 'In Guangdong, many Hong Kong and foreign-owned companies spend very little in research and development, and they are ill-treating their workers. Many factories have no training and no human resources investment. They are just using it as some sort of slave labour. Workers face long hours, low pay and have little motivation to improve quality' (*South China Morning Post*, December 2002).

Working hours
According to Chinese labour law, a worker's normal working hours should be eight hours a day, five days a week, with weekly working hours not exceeding 40. However, this is hardly observed in practice. Workers generally work more than 40 hours a week and often without overtime payment. Migrant workers are generally ignorant about the five-day working rule and generally work for six days without any overtime payment. Workers also tend to work overtime as their wages are too low. Most of the contract manufacturers in China run their factories on two 12-hour shifts enabling them to lower costs by hiring fewer workers. Overtime abuse in electronics factories in China is just as bad as in the garment industry. In Winstron Corporation, a subsidiary of the Taiwan-based Acer group, some of the workers worked for at least 72 hours in a six-day week.[7] The labour law restricts monthly hours including overtime to 249, but some of them work a minimum of 312 hours a month. Similarly in an electronics factory in Nanshan, Shenzhen SEZ, workers

7. *San Jose Mercury News*, 24 November 2002, 'Cheap Products' Human Cost', http://www.mindfully.org/WTO/China-PC-Success24nov02.htm

complained that they had to do overtime unwillingly. If they objected, they were seen as neglecting their duty or fined. In another factory in Huizhou, workers did an average of 80-90 hours overtime per month.

The other problem is that if a company reduces its working hours, bowing to pressure from various groups or in compliance with a code of conduct, this does not necessarily mean there is a reduction of the work load. Workers have to complete their quotas in the stipulated time, which may result in working late hours without overtime payment.

Wages

The Chinese government has set minimum wages for the manufacturing sector. These vary from region to region and in 2002 ranged from the lowest of 160 Yuan (US$20) in Sichuan province to the highest of 574 Yuan (US$72) in Guangdong province. However, the minimum wages are not living wages as it is impossible to live on these wages with the present cost of living in Chinese cities. For example, in Guangdong province, workers may have to pay about 200 Yuan for room rent (in shared accommodation) if they are not provided with subsidized accommodation (e.g. a dormitory) by the company. Companies also charge workers about 40-100 Yuan for food (subsidized). As most workers are migrants, they have to send a major portion of their earnings home to their families and are left with practically nothing, or with no alternative but to work overtime to make ends meet.

In a 1996 survey carried out by the Hong Kong China Labour Education and Information Centre in 14 foreign-invested electronic enterprises in Shenzhen, Zhuhai and Dongguan in Guangdong province, eight of the enterprises (51.4 per cent) offered wages far below the minimum level. On average, the wages were 17.86 per cent less than the statutory minimum. The lowest wage level was found in Guanya Electronics Factory in Dongguan City, which paid 32.2 per cent less than the minimum wage. The 'best' record was in Zhuhai, where wages were 9.4 per cent less than the statutory minimum. One foreign-owned electronics factory manager openly admitted that when local government increases the minimum wage, the management complies by giving the exact amount to the workers, but then deducts or withdraws subsidies or benefits such as meal allowances. In the end, workers get about the same level of wages as before the increase.

Punishments

In many of the factories, workers are fined or punished for what employers call 'improper behaviour' or even minor mistakes. In one Japanese electronics factory, workers who violate factory rules will be served a yellow card, followed by a deduction of a day's wages. Workers said that most violations are trifle matters such as putting their name tags in the wrong position, or chatting at the workplace. One of the most extreme cases was in Zhuhai, where a Korean female owner ordered over 100 workers to kneel down as a punishment for falling asleep while working and refusing orders. In fact, these workers had been working continuously for four evenings without proper sleep or rest time. One electronics worker in Dongguan was unfairly detained for 100 hours by local security guards for not carrying a temporary resident permit. In fact, he was trying to buy a bowl of noodles after finishing overtime at 10PM and was caught within 100 metres of his factory. In March 2003, one unfortunate young migrant worker from Hunan was beaten to death in a detention centre after local policemen accused him of not being able to produce his temporary resident card. This incident caused an uproar all over the country through highly publicized media exposure and direct action by his family and some legal professionals. These cases are far too

numerous. Despite repeated calls from central government, local authorities still impose all kinds of ridiculous fees and fines on migrant workers.

Workers organizing and organizations
The only union federation legally recognized in China is the All China Federation of Trade Unions (ACFTU), and thus the freedom of association of workers is very restrictive. Moreover, due to rapid investment in China and the mushrooming of manufacturing units, even the unions under the ACFTU constitution do not exist in many of the units. However, this has not stopped workers protesting against injustices. Management resorts to 'any' measures to curb any sort of opposition. The union or government officials (if any) also offer little help or may even oppose the protest. When workers in one Japanese electronics factory organized a strike, they were warned by local public security officials not to spread the news to Hong Kong reporters as it would 'negatively' affect the foreign investment environment. Another strike in a Japanese-owned camera factory was initiated by the young female workers themselves. However, the local union chair promptly appeared, scolded the striking girls, demanded that they behave themselves and coerced them back to work, so as not to upset the investors. In another strike in a Japanese factory, the local labour bureau officer did a quick tour of inspection but did not bother to ask any workers about the situation. He proceeded directly to speak to the management.

The Taiwan Business Association in Dongguan circulated a 'black list' of 39 workers who had joined strikes and demanded unreasonable compensation from one of their members to warn other employers if they happened to interview any of them. After mediation, the local Taiwan Business Association apologized and removed the circular.

In a recent case, a former union chair of a Beijing-based joint venture, Sanhuan Sagami High-tech Company, was dismissed. He claimed that the company dismissed him because he had organized workers to protect their legal rights and this was not in the interests of the venture. According to the Chinese Trade Union Law, a trade union officer cannot be dismissed during his/her contract unless there is a serious breach of duty (*China Daily*, 14 September 2004).

Occupational health and safety
The electronics industry is known for being hazardous, but in a bid to lower operational costs, safety standards are more often than not flouted. This is also due to weak inspections by the authorities, who are more interested in attracting investments by offering the 'cheap' labour. Most of the workers have no idea about the kinds of chemicals being used in the work process and the hazards they pose. There are no medical safety data sheets (MSDS) available on the shop floor, even though it is required legally. Chemical poisoning is very common in these factories, but the long-term impact is not known as workers may not work long in the same factory and when chronic symptoms appear, the workers may be elsewhere and do not necessarily connect their diseases to their previous work environments. Furthermore, the IT industry also involves supporting or downstream work processes, such as plastic moulding or metal-case stamping, which can be found sharing the same factory premises. Some of the cases concerning the health and safety situation in electronic factories are as follows:

■ In 2002, over a period of two years, 38 industrial accidents with 39 serious injuries were recorded in one Taiwanese-owned factory producing computer cases in Dongguan, Guangdong province. Most of the victims suffered from hand injuries or fire burns while operating pressing machines. When

workers reported these cases to the media, the management insulted, intimidated and even beat the victims. Thirty-five workers suffered from benzene poisoning in one home appliance factory in Dongguan because the glue exceeded the safety limit, there was poor ventilation and a lack of any sort of protective equipment.

- In 2002, an electronic appliance factory fire in Shenzhen killed 16 workers and injured 18 others. It was found that the passage was blocked by flammable materials, and there was a lack of fire safety measures. Doors and windows were barred or locked, and workers had no safety training at all. Furthermore, there was poor enforcement on the part of local officials who had turned a blind eye to these problems.

- In 2003, Chen, a female electronics worker found all her teeth were turning blue gradually, but the management refused to provide her with any medical treatment. Her doctor diagnosed her as suffering from lead poisoning because her bed in the dormitory was too close to the exhaust fan of the factory where safety standards were not observed.

Conclusion

On 6 October 2004, nearly 4,000 electronics workers of a Hong Kong-China joint venture, Computine, based in Shenzhen, blocked the street in a protest against low pay and harsh working conditions. This strike paralysed traffic for four hours and workers won a 170 per cent wage rise. One worker said, 'Our basic salary is only 230 Yuan per month (the Guangdong minimum wage is 574 Yuan). We have to work 14 hours a day, seven days a week. Each time you go to the toilet you have to apply to the squad leader first and then sign your name on a log book. If you spend more than five minutes, you will be fined' (*South China Morning Post*, 7 and 8 October 2004). In fact, the local government admitted that major labour disputes had increased more than 12 per cent compared with the previous year.

Industrial relations are not a major concern for many smaller companies, and the better managed firms are now quite concerned to learn about complaints and deal with them through their human resources departments, as noted by some researchers. The abundant supply of migrant workers seems to make the exit of disgruntled workers a substitute for improving labour relations. Workers usually choose to leave the factory and look for other jobs if they are upset by the poor pay and working conditions, rather than make an effort to organize or seek help from the government or union officials. The more desperate ones may use physical violence against their supervisors, employers or family members. Sabotage is another trick frequently used by disgruntled workers.

In recent years, a more popular approach has been to channel complaints or appeals through local/national or Hong Kong newspapers. Under a market economy, local newspapers compete by doing more investigative stories to attract more readers, despite the fact that government censorship is still rather tight. Also, individual journalists who are sympathetic to the workers' sufferings demand that the authorities or the management address these issues. We are now witnessing more and more labour non-governmental organizations (NGOs) being set up in various industrial zones and city centres to provide legal assistance and worker education. They fill a vacuum where unions are pro-management, pro-government or virtually absent, but the demand to respect workers' rights is

growing. For example, Wu, an IT worker lodged the first case against his enterprise union for failure to protect his rights when he was unfairly dismissed. He demanded reimbursement of all his union dues of the previous four years. Workers are becoming more assertive and more willingly to take their employers to courts. Here, NGOs can play an effective role in facilitating the legal process. International NGOs and labour organizations must be prepared to respond positively and actively to these workers' struggles.

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