



Peaceful Rise or Yellow Peril?¹

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Introduction.

The USA and China will be by far, the most important actors in global political economy in the first decades of the coming century. If present trends continue, at some point in the decades ahead, China will overtake the USA's national product, and gradually catch up militarily with the USA. Despite their respective immense strengths, each of them has its own internal system fragility, brought about especially by the way in which the capitalist globalisation has affected the two economies and societies, and especially, the way in which capitalist globalisation has resulted in their deep economic integration. The prospects for global sustainable development hinges around the relationship between these two mighty forces. On the one hand, China is the world's most coherent, integrated and long-lasting civilisation. On the other hand, the USA is the world's most powerful economy and nation, the quintessential force for the global spread of capitalism.

1. Chinese system fragility.

Since the late 1970s, China has enjoyed one of the most remarkable periods of economic growth ever seen. However, the country faces deep economic, political and social challenges. These include the vast extent of poverty and rapidly growing inequality; the challenge for Chinese businesses from the global business revolution; a deeply degraded natural environment; declining capabilities of the state; a comprehensive challenge in international relations; widespread corruption; and extreme dangers in engaging closely with the global financial system. The Chinese leadership is trying to deal simultaneously with the challenges of globalisation, transition and development. No country has ever faced such a set of challenges. There are no textbooks to guide China along this path. The responsibilities for the leadership are massive, because the price of failure is so huge. The possibility of social and political disintegration is real. Every effort of policy has to be directed towards avoiding this potentially catastrophic outcome. In their search for a way forward, China's lead-

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ers are looking to the lessons from the country's own past, as well as to those from other countries, in order to find a way to build a socially just, stable, cohesive and prosperous society. This effort is of vital importance, not only for China, but also for the whole world.

Poverty and inequality.

Behind almost every aspect of China's development process in the early 21st century lies the harsh reality of the 'Lewis model' of economic development with unlimited supplies of labour (Lewis, 1954). China has a huge population of almost 1.3 billion, increasing by around 15-16 million people each year (SSB, ZTN, 2002). Almost 70 per cent of the Chinese population still lives in the countryside. There are as many 150 million 'surplus' farm workers. Rural incomes stagnated from the mid-1990s to the early 2000s, and may even have declined. Rural income distribution has become much more unequal: the Gini coefficient of rural income distribution rose from 0.21 in 1978 to 0.40 in 1998. There was a massive decline in absolute poverty in the early years of China's rural reforms post-Mao (Nolan, 1988). However, Chinese official data show that there are approximately 580 million rural dwellers (73 per cent of rural households) with less than US\$360 per year (SSB, ZTN, 2002: 343).²

The great extent of rural underemployment provides intense incentives for rural-urban migration, and intense downward pressure on non-farm wages in unskilled and low-skilled occupations. There are as many as 150 million rural migrants working in the urban areas. They are predominantly unskilled labour, earning US\$1-2 per day. Alongside the poor rural migrants, as many as 40-50 million workers have lost their jobs due to reform in state-owned enterprises.

Alongside these disadvantaged social groups, a new urban 'middle class' is fast emerging. Large amounts of FDI by multinational firms is producing clusters of modern businesses and residential areas, isolated and protected from the surrounding mass of poor people. Chinese privatisation has been characterised by widespread insider dealing and corruption, most notably in the ubiquitous triangular relationship between the local Communist Party, the banks and the allocation of publicly owned land for 'development'. The official Gini coefficient of the urban distribution of income rose from 0.16 in 1978 to 0.34 in 2001 (SSB, ZTN, 1993 and 2002; UNDP, 2002: 56-8). However, these data exclude most rural migrants and foreign employees, and underestimate the highest incomes segments among the native Chinese urban population. If all these fac-

² The World Bank estimates that in 1995 there were 716 million people (58 per cent of the population) who had less than US\$2 per day, and around 280 million who lived on less than US\$1 per day (World Bank, 2001: 236).

tors are considered, then China's urban income distribution is among the most unequal in the world. The top 10 per cent of the Chinese population reportedly now accounts for 32 of national income and 49 per cent of total financial assets (UNDP, 2002: 69). The early years of the 21st century witnessed a level of strikes and protests that has not been seen in China since the 1920s. Around 300 million Chinese workers are now employed in the non-farm 'informal' sector, without the protection of trade unions, in mainly small enterprises with little regulation over conditions of work, and without unemployment or health insurance. A large fraction of these are illegal 'immigrants' living as second class citizens within the urban areas, enduring great personal insecurity and suffering all the 'hidden injuries of class' of an unskilled proletariat.

The global business revolution.

Since the 1980s, China has implemented industrial policies intended to nurture a group of globally competitive large firms. In fundamental senses these industrial policies have failed. China is becoming the workshop *for* the world, rather than the 'workshop *of* the world'. Over 60 per cent of its industrial exports are from foreign invested enterprises. A substantial fraction of the remainder of the country's exports consists of industrial products that are either OEM manufactures, or low value-added, low technology, non-branded goods for global giant firms (e.g garments, footwear, furniture, toys). While the world's giant firms are rapidly building their research and development bases in China, employing relatively cheap, highly-skilled Chinese researchers, indigenous Chinese firms spend negligible amounts on research and development. There is not a single Chinese firm in the world's top 700 firms by research and development expenditure (DTI, 2003). China does not have a single one of the world's top 100 brands. Its leading firms are almost unknown outside the country. Among the fourteen Chinese firms in the *Fortune 500*, none has become a truly globally competitive company that could compete without government protection. All of these firms are state-owned and subject to systematic state interference in their operation.

On the internal front, China's industrial policy encountered numerous problems. These included policy inconsistency; misguided pursuit of 'enterprise autonomy' rather than the multi-plant large firm; an impoverished mass of consumers within the protected domestic market; institutional barriers to cross-regional mergers and acquisitions; pursuit of greater firm size through diversified operations, leading to an 'illusion of scale'; persistent intervention in enter-

prise decisions by Party and Government officials; and huge 'legacy costs' deriving from the large numbers employed in the former SOEs.

On the international front, China's large firms face severe challenges. China's attempt to build large globally competitive firms has coincided with a revolutionary epoch in world business history, with a unique intensity of merger and acquisition. An unprecedented degree industrial concentration has been established. A veritable 'law' has come into play. Within the high value-added, high technology, and/or strongly branded market segments, a handful of giant firms, the 'systems integrators', occupy upwards of one-half of the global market (Nolan, 2001a and 2001b). The process of concentration ripples across the value chain. Leading firms in each sector select the most capable suppliers, in a form of 'industrial planning', adopting 'aligned partners' who can work with them across the world. A 'cascade effect' produces intense pressures upon first tier suppliers, forcing them to develop leading global positions, achieved through expanded research and development, and investment in global production networks. The result is a fast-developing process of concentration at a global level in numerous industries that supply the systems integrators.

The full flowering of capitalism's tendency towards industrial concentration presents a comprehensive challenge for large firms in developing countries. At the dawn of the twenty first century, intense industrial concentration among both systems integrators and their supply chain, brought about through pressure from the 'cascade effect', presents a comprehensive challenge for both Chinese firms and policy-makers. Not only do they face immense difficulties in catching up with the leading systems integrators, the visible part of the 'iceberg', but they also face immense difficulties in catching up with the powerful firms that now dominate almost every segment of the supply chain, the invisible part of the 'iceberg' that lies hidden from view.

In September 2004, almost three years after China joined the WTO, Li Rongrong, Head of the State-owned Assets and Administration Commission (SASAC) acknowledged: *'There is still a huge gap between China's large enterprises and the world's leading multinational companies, whether one looks at the comparison in terms of their number, scale or efficiency, or from the angle of strength of profits and innovative capability, or internationalization'* (People's Daily website). Successful late-comer industrialising countries, from the USA in the late nineteenth century to South Korea in the late twentieth century,

each produced a group of globally competitive firms. China is the first successful latecomer not to have done so. It has become the sixth largest economy (the second largest in PPP terms) (World Bank, 2004) without having a group of internationally competitive large firms. This is highly significant in the history of economic development.

The hugely influential American journalist Thomas Friedman has characterised the globalised business environment as a 'flat world' (Friedman, 2005), in which firms from developing countries can easily catch up with those from the high income countries. This view strongly nurtures American popular paranoia about the 'rise of China'. It helps to nurture the widely-held view that Chinese large firms are rapidly taking over the world stage from the established business leaders from the High Income Countries. Viewed from the perspective of Chinese policy makers and business leaders, the world appears as anything but 'flat'. Indeed, the only sense in which it is 'flat' is that it has been 'flattened' by the elephants from the High Income Countries, especially those from the USA, which dominate the global business system.

The environment.

For the Chinese leadership, the achievement of high levels of economic growth without serious damage to the country's environment is one of the central policy challenges in the coming years. China's environmental reflects the intense pressure of a huge and growing population upon China's already fragile natural environment, with the impact hugely reinforced by high-speed industrial growth. The area affected by serious soil erosion has increased to include around 38 per cent of the entire country (UNDP, 2000: 70). The area of desert is increasing at the rate of around 2,500 square kilometres per year, equivalent to the area of a medium-sized country. China's area of natural forests is falling at an alarming rate. There is 'rampant water pollution', and a serious and worsening shortage of fresh water. China's emission of organic water pollutants is as large as that of the USA, India, Russia and Japan combined (World Bank, 2004: Table 3.6). Recent Chinese provincial-level studies of 'Green National Product' estimate that there is only negligible 'real growth' when destruction of the natural environment is taken into account.

However, the environmental challenges that China faces include also the international impact of the country's economic rise. The country's explosive industrial growth has led to high-speed expansion of energy-intensive industries. By

the mid-1990s, China had overtaken the USA as the world's biggest coal producer, accounting for almost 30 per cent of global output. Coal provides a low-cost way to meet a large fraction of China's booming energy demands. China is the world's second largest producer of carbon dioxide, standing at 50 per cent of the level of the USA, but its per capita emissions are still a mere 11 per cent of those of the USA (World Bank, WDI, 2004: Table 3.8). If China's were to sustain its current growth path and at some point catch up with today's USA level of per capita income, and were to use similar technologies, China's emission of carbon dioxide would be one-fifth greater than those of the entire world today.³ Official government policy is for every family eventually to have a car (Smil, 2004: 26), and the transport of goods relies heavily on commercial trucks: 'Transport systems have been guided by the strong development symbol that the motorised society represents' (UNDP, 2002: 60). China's decision-makers 'appear surprisingly indifferent to alternatives to motor vehicles' (UNDP, 2002: 59). Solutions to urban air pollution, which is increasingly caused by automobile traffic, 'are sought through technical improvements rather than in alternative transport systems' (UNDP, 2002: 60). It is predicted that the number of automobiles in China will reach 50 million by 2010 (UNDP, 2002: 49).

Energy.

Between 1994 and 2004, China's total primary energy consumption increased by 71 per cent and its share of global primary energy consumption increased from 9.8 per cent to 13.6 per cent (BP, 2005). China has abundant reserves of coal, and it is still by far the most important component of China's primary energy consumption, accounting for 69 per cent of the total in 2004 (BP, 2005). China has large coal reserves, estimated to total around 13 per cent of the world total (BP, 2005). The relatively low cost of coal provides a strong incentive to continue to use coal as the main source of primary energy.

However, the rapid growth of passenger vehicles and trucks has produced an accelerating demand for oil, with an increase of 113 per cent in oil consumption between 1994 and 2004. However, China's oil reserves amount to only around 1.4 per cent of the world total (BP, 2005), and between 1994 and 2004, China's oil production only grew by just 19 per cent. The efforts by China's oil companies to expand their ownership of overseas oil assets have produced very limited results. Of the total of 1.7 million barrels per day that China imported in 2002, only 100,000 barrels was acquired from sources in which Chinese oil

³ Of course, technical changes will tend to reduce the amount of energy used per unit of final product, but the remorseless growth of output, combined with the prospect of further population growth, and the strong incentive to rely on fossil fuels, make it virtually certain that China's emissions of carbon dioxide will continue to grow to the point that China is the world's largest producer of carbon dioxide.

companies had equity investments (USCESRC, 2003: 8). In 1994, China's oil production amounted to over 93 per cent of its consumption, but by 2004 this had fallen to just 52 per cent (BP, 2005). By 2004, China was importing 2.5 million barrels of oil per day, and the price of these imports has risen greatly since the mid-1990s. It is forecast that by 2020 China will be importing as much as three-quarters of its total oil consumption (USCESR, 2003: 8).

The prospect of continuing expansion in demand for oil, and ever-growing reliance on oil imports, has made energy security a central issue in national economic policy and international relations. The need to secure oil supplies means that China's Middle Eastern policy is centrally important, since the region accounts for 62 per cent of the world's oil reserves (BP, 2005). Around one-half of China's oil is imported from the Middle East. However, Central America and Africa, together have 18 per cent of global oil reserves, while the former Soviet Union has over 10 per cent (BP, 2005), so these regions also are important for China's energy security.

If China were to follow the US pattern of growth its primary energy consumption would grow to immense levels. Today, China's per capita consumption of primary energy is only around one-ninth of that in the USA: the USA today consumes around 8 metric tons (oil equivalent) of primary energy per person, compared with around 0.9 metric tons per person in China (WB, WDI, 2004: 140-2). The USA's per capita consumption has remained relatively stable at this level for some time, growing by around 3 per cent between 1990 and 2001.⁴ If China were to climb to the USA's current level of per capita consumption of primary energy, it would consume around 10,400 million metric tons of primary energy (oil equivalent), slightly more than the current world total consumption of 10,000 million metric tons (WB, WDI, 2004: 142). There are many different scenarios for China's path of growth and for the role of technical progress both in energy production and consumption.⁵ However, it is hard to imagine a scenario in which national energy security is not of central importance for China as its energy needs expand.

4 From 7.73 metric tons of oil equivalent per person in 1990 to 8.00 tons in 2001 (WB, WDI, 2004: 140-2).

5 The most obviously issues include the contribution of coal liquefaction from domestic coal supplies and the pace of advance in the energy efficiency of machines, especially transport equipment.

The capability and role of the state.

The professional capability of the Chinese state has greatly increased since the early 1980s. However, it needs comprehensive reinvigoration that goes far beyond improved technical competence. It needs substantially to expand its scope in order to undertake activities that the market is unable to provide and to re-

establish its ethical foundations. Reinvigorating a state apparatus that has atrophied may present greater challenges than constructing from scratch a strong, effective apparatus to serve development needs.

Government. China is a vast, poor country with urgent development needs, which can only be met by state action. The Chinese state attempted to increase its fiscal strength after the mid-1990s, with a series of important reforms. However, central government revenue still accounts for only around 7 per cent of GDP (World Bank, WDI, 2004: Table 4.11). The share of central government revenue in GDP is not only below that of other large developing countries, but also below even that of Russia.⁶ The state's reduced fiscal strength has forced it to look for drastically increased contributions from fees paid by people when they use health and education services. By the end of the 1990s, budgetary allocations covered just 46 per cent of actual expenditures on education (World Bank, 2002: 85). A wide variety of other sources of funding have been mobilised to finance education, including surcharges, fees collected from students, revenues from school-run enterprises, work study programmes, donations and gifts. Between the late 1980s and mid-1990s, there was 'a substantial deterioration in the educational status of the poor' (World Bank, 2002: 42).

⁶ In 2001, the share of central government revenue in GDP stood at 7.2 per cent in China, 13.0 per cent in India, 14.8 per cent in Mexico, 15.6 per cent in Pakistan, 21.2 per cent in Indonesia, and 26.8 per cent in the Russian Federation (World Bank, WDI, 2004: Table 4.11).

Over the past five decades, China has built an impressive rural health system, and overall health achievements are impressive, with a life expectancy of 70 and an infant mortality rate of 31 per 1000 live births. At the peak of the rural people's communes before 1976, around 85 per cent of villages had a co-operative medical system, albeit often rudimentary. When the agricultural collectives were disbanded in the early 1980s, the financial basis for risk-sharing was largely eliminated. Over 90 per cent of the rural population were without any coverage from risk-pooling welfare schemes (World Bank, 2002: 116). In 1999, the government budget funded just eleven per cent of total health expenditure, while 59 per cent came from out-of-pocket payments (World Bank, 2002: 43). These changes have resulted in a system that provides highly unequal access to health services. China ranks 61st out of 191 countries in overall quality of health, but 188th in terms of fairness in financial contribution (World Bank, 2002: iv).

Party. Communist Party leadership is the foundation of China's modernisation. The Party is deeply intertwined with every aspect of socio-economic life. In the late 1980s and early 1990s, Deng Xiaoping warned repeatedly of the dangers of China collapsing into chaos. In his 2001 speech to celebrate the 80th anniversary of the founding of the Chinese Communist Party, Jiang Zemin stated: '

[The Party] must address the two major historic subjects of enhancing the Party's ability of exercising state power and art of leadership, and resisting corruption and warding off risks...[W]e must be strict in Party discipline. We should have a deeper understanding of the loss of political power by some Communist Parties in the world that had long been ruling parties and learn a lesson from them'.

In recent years, the level at which Party members were tried and sentenced for corruption (including even execution in some cases) has risen to include many in high positions. These include a former deputy governor and former mayor of Shijiazhuang, Hebei's largest city; the mayor of one of China's largest cities, Shenyang; a former vice-minister of public security; a former chief of military intelligence; and a deputy chairmen of the National People's Congress. Official reports to the National People's Congress in early 2003 declared that in the previous five years, the war against graft had been substantially stepped up, with a total of almost 13,000 prosecutions of government officials (SCMP, 11 March 2003). The reason that so many cases of corruption have come to light is that China's leadership is aware of the threat that it poses, and is trying to do something about it.

Financial institutions.

The Asian Financial Crisis provided a shocking insight into the fragility of the country's financial institutions. China appeared to escape any effects of the crisis, due to the fact that the *renminbi* was not fully convertible. In fact, the crisis had a deep impact through the medium of Hong Kong and the massive debts accumulated there by Mainland 'trust and investment' and 'red chip' companies. The most visible of these were GITIC (Guangdong Trust and Investment Company) and GDE (Guangdong Enterprises) which included five floated 'red chip' companies. During the Asian Financial Crisis, GITIC went into bankruptcy while GDE was insolvent and comprehensively restructured. Prior to the crisis, they each had been regarded as model institutions by international lenders. GITIC's bankruptcy and GDE's restructuring allowed the outside world to look closely inside large Chinese companies for the first time. The investigations revealed comprehensive failure in corporate governance, including disastrous lending practices: a large fraction of their loans were made to firms and institutions that were unable or unwilling to repay their debts. A substantial part of their 'investments' were highly speculative, including heavy participation in the property boom in Guangdong Province and Hong Kong. Investigations into Guangnan, one of GDE's 'red chip' companies, concluded that it was basically a 'criminal company': 35 people from Guangnan were ei-

ther arrested or had warrants for their arrest issued in Hong Kong. Guangnan was a Hong Kong-listed company, a 'red chip', Hong Kong's environment of high quality rules on corporate governance; over 40 per cent of its shares were owned by public investors; its accounts were audited by a famous international accountancy firm; it had two independent directors, both prominent Hong Kong businessmen.

In the late 1990s, especially after the Asian Financial Crisis, the central government began a massive attempt to 'clean up' the country's financial institutions. The cases of GITIC and GDE demonstrate how long and complex will be the process of changing China's financial institutions into well-governed, modern financial institutions. The clean up revealed shocking evidence about the state of corporate governance in China's main banks. In early 2002, it was revealed that the five bank officials at the BOC branch in Kaiping city (Guangdong) had stolen the equivalent of nearly US\$500 million. The problems penetrated to the apex of the country's banking system, Zhu Xiaohua, Li Fuxiang and Wang Xuebing were members of Premier Zhu Rongji's team of four 'can-do-commanders'. From 1993 to 1996, Zhu Xiaohua was deputy governor of the People's Bank of China and then head of China's foreign exchange reserves. In 1996 he was appointed head of China Everbright Bank. In 1999, he was arrested, and subsequently sentenced to fifteen years imprisonment. Li Fuxiang was formerly the head of the Bank of China's foreign exchange dealings in New York, and subsequently was placed in charge of the national foreign exchange reserves. In May 2000 he committed suicide. Wang Xuebing, formerly head of the China Construction Bank and then of the Bank of China, was arrested in 2002 and subsequently sentenced to twelve years imprisonment.

Under the terms of the WTO Agreement, China's financial firms will face escalating international competition. Since the 1980s the world's leading financial firms have been through a period of unprecedented merger and acquisition. The period saw the emergence of super-large financial services firms, such as Citigroup, JP Morgan Chase, and HSBC. They have rapidly acquired dominant positions in Latin America and Eastern Europe. When Citigroup acquired Banamex, Mexico's 'national champion' in financial services, the *Financial Times* commented: 'The acquisition of Bannamex underscored the rapacious appetite of Citigroup for assets in the developing world'. Citigroup itself said: 'China is top of our radar screen'. If China's indigenous large financial firms cannot achieve their own self-reform, then the global giants are likely to assume an increasing role in the commanding heights of China's financial sector. Citigroup

argues that the big four banks in China should be ‘torn apart into small units in order to avoid a financial crisis’, which would make it far easier for the global giants to ‘rout the enemy one by one’.

Conclusion.

China faces wide-ranging challenges that threaten the entire social, economic and political system. Due to the number and intensity of the challenges that China faces, there is a high possibility that at some point a ‘fire’ will break out. It is highly likely that it will be connected with the financial system. During the Asian Financial Crisis, China came close to a major financial crisis. The country survived only by adopting bold and effective policies. If China were to face a financial crisis of the dimensions that have regularly attacked developing countries since the 1980s, it would be difficult to maintain overall system stability. The relationship of political instability with financial crisis is long-standing: ‘Since the commencement of the eighteenth century there has been no serious revolution in Europe which has not been preceded by a commercial and financial crisis’ (Marx, 1853: 9). The challenges that confront China today resemble those that confronted Britain in 1848, in the midst of that country’s surging industrialization. The Chinese leadership is groping for a way to ensure ‘harmonious development’, and avoid socio-political upheaval in the midst of immense internal challenges. However, it faces the deepest of challenges also in international relations, especially in its relationship with the world’s dominant power, the USA.

2. American system fragility.

American firms and the Global Business Revolution.

In an article published in 1972, Stephen Hymer made the following speculation: ‘Suppose giant multinational corporations (say 300 from the US and 200 from Europe and Japan) succeed in establishing themselves as the dominant form of international enterprise and come to control a significant share of industry (especially modern industry) in each country. The world economy will resemble more and more the United States economy, where each of the large corporations tends to spread over the entire continent, and to penetrate almost every nook and cranny.’ (Hymer, 1972).

In the 1980s and early 1990s a large part of business economics was concerned with explaining the relative success of East Asian late-comers. There was a large literature on the apparent disadvantages of the Anglo-Saxon business

structure. The capitalist stock-market-based system was argued to be disadvantageous for long-term growth and competitiveness. The 1990s saw a dramatic turn-around in relative economic performance, with a sharp improvement in the relative performance of US firms: 'The US has the lion's share of those corporations equipped to exploit global markets. It also supplies the bulk of the technology that knits those markets together' (*FT*, 14 June 1997). The 1990s business revolution demonstrated that the stock market can be compatible with long-term perspectives by business leaders. By the end of the 1990s, American firms had consolidated their position at the heart of capitalist globalisation.

US-based big businesses absorbed many of the lessons of the East Asian model, especially those of Toyotist outsourcing. However, they have applied those lessons on a global scale. Moreover, they have been able to apply the outsourced, lean-production structure to the whole value chain, using the technological revolution in information technology that has taken place in the 1990s: 'Throughout the 1990s corporate America, which grew lazy in the 1970s and early 1980s, has been in the throes of a far-reaching restructuring - much of it learned from Japan. Displaying remarkable flexibility, many US industries have regained their competitive edge...and this has helped power an extraordinary bull market in equities' (*FT*, 24 January 1997).

The USA remains by far the world's most powerful stock market. Its share of the total value of global stock markets rose from 33 per cent in 1990 to 47 per cent in 2003 (WB, WDI, 2004: 268). In 2004, firms headquartered in North America account for 175 of the Fortune 500 companies (ranked by sales revenue) (*Fortune*, 26 July 2004). In the same year there were 247 North American firms in the FT 500 companies (ranked by market capitalization), accounting for 55 per cent of the total market capitalization of FT 500 firms (*FT*, 27 May 2004). Firms from Europe accounted for 30 per cent of the FT 500 total stock market capitalization, and those from Japan accounted for 9 per cent. Firms from the whole of the rest of the Asia Pacific region, the Middle East and Latin America accounted for just 6 per cent of the total.

The vast bulk of global technical progress takes place in a relatively small number of giant firms. Among these firms, those from North America are dominant. In 2005, out of the world's top 1000 firms ranked by R&D expenditure, 440 were headquartered in North America (DTI, 2005). They accounted for 39 per cent of the total R&D expenditure of the world's top 1000 firms, compared

with 35 per cent for firms from Europe, and 22 per cent for those from Japan. Firms from the whole of the rest of the world accounted for a mere 4.4 per cent of the total (DTI, 2005). The so-called 'BRIC' countries (Brazil Russia, India and China), with a combined population of 2.65 billion (43 per cent of the world's total) between them had a mere nine firms among the world's top 1000 firms ranked by R&D expenditure. A group of five small European countries (Denmark, Finland, Norway, The Netherlands, Sweden, and Switzerland) have a total of 92 firms in the world's top 1000 companies ranked by R&D expenditure (DTI, 2005).

Alongside the USA's dominance of the epoch of capitalist globalisation, the selfsame process has stimulated large internal divisions and uncertainties about the position of the USA in the 21st century.

Social fragility.

Liberalisation of capital markets since the 1980s has opened up a vast world of low-priced labour across the 'transition' and 'developing' countries for both unskilled and skilled labour. American workers are being forced to work longer hours, accept reduced rates of overtime pay, and reduced company contributions to health insurance and pensions. In the USA between 1970 and 2000 number of manufacturing jobs fell by around six million (*NY Times*, 24 May 2005). In order to compete in ferocious global competition most large American firms are bringing to an end their 'defined pension' schemes, and replacing them with 'defined contribution' schemes, which greatly increase ordinary workers' insecurity about their old age.

The gap in income between the global elite and the local population has widened sharply during the last two decades. The after-tax income of the top 1 per cent of American households jumped 139 per cent to more than US\$700,000 from 1979 to 2001 (adjusted for inflation), while that of the bottom middle fifth rose by 17 per cent and that of the poorest fifth rose only 9 per cent (*NY Times*, 15 May 2005). The income of the top 0.1 per cent of the US population includes around 145,000 tax-payers, each with an income of over US\$1.6 million, with an average income of US\$3 million in 2004. Their share of America's income rose from around 3.5 per cent in 1980 to over 10 per cent in the year 2000 (*NY Times*, 5 June 2005).⁷ The widening gaps in income in the USA are reducing the degree of inter-generational mobility. Harvard President Larry Summers believes that 'the most serious problem facing the United States today is the widening gap between the children of the

⁷ Their share fell slightly after 2000, reaching 7.4 per cent in 2004, still more than double the share in the 1970s.

rich and children of the poor' (quoted in *NY Times*, 24 May 2005). Alan Greenspan warned of the dangers of current trends in the distribution of income in the USA: 'For the democratic society, that is not a very desirable thing to allow to happen' (quoted in *NY Times*, 5 June, 2005).

As consumers, American people have benefited enormously from globalisation, with an unprecedented fall in the price of most goods and services. However, as producers, they have faced greatly increased pressures. Ordinary Americans increasingly believe that the interests of nominally US-based multinational corporations and their shareholders are divorced from the interest of American citizens.

Energy fragility.

The USA is by far the world's largest consumer of primary energy. In 1990 it already accounted for 22.5 per cent of the world total. Between 1990 and 2001 its consumption of primary energy rose by over 18 per cent, and by 2001 its share of the world total had increased to 22.8 per cent (WB, WDI, 2004: 142). The USA's oil production fell from 8.4 million barrels per day in 1990 to 7.2 million in 2004, while its oil consumption rose from 17.7 million barrels per day to 20.5 million barrels the same period (BP, 2005). The USA's domestic oil production as a share of total consumption fell from 47 per cent in 1990 to just 35 per cent in 2004. Net oil imports rose from 45 per cent of total consumption in 1994 to 58 per cent in 2004 (BP, 2005). Oil accounts for over two-fifths of total American primary energy consumption, and it is critically important for the country's transportation system. In President George W. Bush's words, America is 'addicted to oil'. Energy security, and, especially, oil security has become a more important issue than ever in US foreign policy.

China is by far the biggest potential challenger to the USA in its search for energy security. In the view of Martin Wolf, one of the optimistic analysts of globalisation, 'conflicts over energy resources will be a real issue for decades ahead' (Wolf, 2005a). US policy-makers believe that 'China is increasingly active in striving for energy resources in ways that portend direct competition for energy resources with the United States', and that 'this is producing a possibility of conflict between the two nations' (USCESRC, 2005: 171). Although there are many ways in which China and the USA can cooperate over energy, there are also important contradictions between them. Six of the world's top fourteen firms in the Fortune 500 are oil companies. Of these three (Exxon-Mobil, Chevron Texaco, and Conoco-Phillips) are American-headquartered. Although

the leading oil companies are global giants, and have large reserves, the vast bulk of the world's oil reserves (around 70 per cent) are owned by 'national oil companies' (NOCs). A substantial fraction of the oil that is processed by the leading American (and European) oil companies is bought on the open market, ultimately coming from the NOCs. The leading American (and European) oil companies had hoped to substantially increase their access to the oil reserves of the NOCs through their technological superiority and capital resources. However, the recent rise in the price of oil has enormously increased the revenue of the NOCs and reduced their incentive to turn to the stock market oil companies for investment and technology. This situation, combined with the sharp increase in oil demand from China has made US policy-makers increasingly apprehensive about China's role in global oil markets.

Many US policy makers believe that China is following a dangerous policy of trying to secure oil supplies by 'owning oil at the point of production' (USCESRC, 2005: 169). The Chairman of the US-China Economic and Security Review Commission has indicated that 'China's strategic approach to secure its oil supply is mercantilist in nature and conflicts with US energy policy that relies on open markets and promotes sharing arrangements in the event of supply disruptions' (USCESRC, 2005: 171). US policy makers believe that Latin America provides an example of China's 'mercantilism'. They consider that China is following a 'neo-colonial' policy in the region, in which it 'secures markets for its manufactured goods in exchange for raw materials from its weaker partners': 'Ambitious mercantile powers aim to keep any advanced industrial project in their country while relegating trade partners to subordinate supplier status. The overseas expansion of China's NOCs fits this pattern' (USCESRC, 2005: 169). The Chairman of the USESRC, Richard D'Amato argues that 'it is critical to persuade China to abandon this mercantilist spree to lock up attractive energy supplies wherever it can, and instead to participate [in planning] for sharing oil in the case of supply disruptions and begin relying on free markets to promote energy security for everyone' (USCESRC, 2005: 171).

There are similar fears being expressed on a wider basis about China's expansion in Africa, which is viewed by some as a 'new kind of colonialism' (*FT*, 23 February 2006). Trade between China and Africa rose from around US\$10 billion in 2001 to around US\$40 billion in 2005 (*FT*, 23 February 2006).⁸ Africa is said to add an extra dimension for China, 'a continent three times its own size, less populated than itself and stocked with many of the raw materials it needs':

⁸ In 2005, China's imports from Africa totalled around US\$22 billion compared with its exports to Africa of around US\$18 billion.

'crude oil from Angola, platinum from Zimbabwe, copper from Congo-Brazzaville, iron ore from South Africa – all are on China's shopping list' (*FT*, 23 February 2006). China is viewed as 'resolutely and rapidly extending its presence and influence across the African continent as its companies move into terrain where western business hesitates to tread' (*FT*, 23 February 2006). China's expansion in Africa has been described as at one level 'a straightforward resources grab, sinking billions of dollars into promising oil zones' (*FT*, 23 February 2006). However, at another level, it is also viewed as engaging in 'a mix of influence-building and opportunism': 'Like Africa's former colonisers, [China] cements political and trade relations with aid, special concessions, debt relief, scholarships, training and the provision of specialists' (*FT*, 23 February 2006). It is viewed as being ready to back its commitments with military assistance and arms, 'providing equipment to countries such as Zimbabwe and Sudan where other suppliers are barred by embargoes' (*FT*, 23 February 2006).

Environmental fragility.

The USA is deeply locked in to a growth pattern that uses fossil fuels as the main source of primary energy. The US Senate voted by 95-0 not to join the Kyoto Protocol. The Senate passed a resolution which stated that exemption of developing countries was 'inconsistent with the need for global action, and that the USA should not sign a treaty without specific commitments for the developing countries' (Lomborg, 2001: 304). Between 1990 and 2000, the USA increased its emissions of carbon dioxide by 16.3 per cent, and 2000 it accounted for 24.4 per cent of total world carbon dioxide emissions (WB, WDI, 2004: 146). Even more significantly, the USA accounted for no less than 46.3 per cent of the total global increase in carbon dioxide emissions in the period 1990-2000 (WB, WDI, 2004: 147).

The example set by the USA augurs ill. The USA is by far the most rich and powerful country, but it refused to join the Kyoto Protocol, specifically because the developing countries were allowed not to participate for the period 1990-2010. The USA continues to expand its emissions of carbon dioxide while the Kyoto signatories struggle to reduce theirs to the level of 1990. The USA's total emissions of carbon dioxide rose from 4.8 billion metric tons in 1990 to 5.6 billion tons in 2001 (i.e. an increase 16 per cent in just a decade) (WB, WDI, 2004: 146). The USA's per capita emissions of carbon dioxide are 22 times the average level of those in low income countries, and nine times those of China (WB, WDI, 2004: 146). That the USA was unprepared to join the Kyoto Protocol without matching action being taken by the world's poor-

est countries is an ominous signal for the possibility of the world achieving the collective action solutions necessary for global survival under US leadership in the decades ahead.

In the last few years, public opinion in the High Income Countries has become enormously exercised by the issue of global warming. There is a gathering hysteria over the perceived threat to human civilisation from burning fossil fuels. A wide spectrum of public opinion in High Income Countries in general, and in the USA in particular, increasingly views China as the major threat to global environment in the coming century.

In his best-selling, apocalyptic book, *'Collapse'*, the American author Jared Diamond⁹ singles out China (Diamond, 2005, chapter 12: 'China, Lurching Giant') as the country that is most representative of the current challenges facing mankind in the struggle to overcome the threat to its very existence posed by environmental damage: 'China's environmental problems are among the most severe of any major country, and are getting worse' (Diamond, 2005: 358). Diamond warns: 'China's large population, economy, and area also guarantee that its environmental problems will not remain a domestic issue but will spill over to the rest of the world, which is increasingly affected through sharing the same planet, oceans, and atmosphere with China...China is already the largest contributor of chlorofluorocarbons, other ozone-depleting substances, and (soon) carbon dioxide to the atmosphere; its dust and aerial pollutants are transported eastwards in the atmosphere to neighbouring countries and even to North America; and it is one of the two leading importers of tropical rainforest timber, making it a driving force behind tropical deforestation' (Diamond, 2005: 359). Diamond continues: 'Even more important than all those other impacts will be the proportionate increase in total human impact on the world's environment if China, with its large population, succeeds in its goal of achieving First World living standards – which also means catching up to the First World's environmental impact' (Diamond, 2005: 350). He believes that if China achieves First World living standards it will 'approximately double the entire world's human resource use and environmental impact': 'But is doubtful whether even the world's current human resource use and impact can be sustained. Something has to give way. That is the strongest reason why China's problems automatically become the world's problems' (Diamond, 2005: 373).

Diamond paints a nightmare vision of the environmental implications for the world of 'China's Rise' (Diamond, 2005: 370-3). He forecasts that if current

9 Jared Diamond was born in Boston. He is professor of Geography and Environmental Health at UCLA. His book 'Collapse' is a worldwide bestseller. It has touched a deep popular nerve.

trends continue, 'emissions rising in China, steady in the US (sic), declining elsewhere' by the year 2050 China will become the world leader in carbon dioxide emissions, accounting for 40 per cent of the world's total emissions. He states that China 'already leads the world in the production of sulphur dioxides, with an output double that of the US': 'Propelled eastwards by winds, the pollutant-laden dust, sand, and soil originating from China's deserts, degraded pastures, and fallow farmland gets blown to Korea, Japan, Pacific Islands, and across the Pacific within a week to the US and Canada. Those aerial particles are the result of China's coal-burning, deforestation, overgrazing, erosion, and destructive agricultural methods' (Diamond, 2005: 371). China will soon overtake Japan as the world's largest importer of tropical timber. Diamond argues that China is, in effect, 'conserving its own forests' by 'exporting deforestation to other countries, several of which (including Malaysia, Papua Guinea, and Australia) have already reached or are on the road to catastrophic deforestation' (Diamond, 2005: 372).

Diamond argues that several of China's 'exports' pose a severe environmental threat to the USA: '[T]he three best-known pests that have wiped out numerous North American tree populations – the chestnut blight, the misnamed "Dutch" elm disease, and the Asian long-horned beetle – all originated in China or else somewhere nearby in East Asia' (Diamond, 2005: 371). He believes that the Chinese grass carp, 'now established in rivers and lakes of 45 US states', competes with 'native fish species and causes large changes in aquatic plant, plankton, and invertebrate communities' (Diamond, 2005: 371).

Diamond is concerned at yet another Chinese 'export' that threatens the USA: 'Still another species of which China has an abundant population, which has large ecological and economic impacts, and which China is exporting in increasing numbers is *Homo Sapiens*. For instance, China has now moved into third place as a source of legal immigration into Australia and significant numbers of illegal as well as legal immigrants crossing the Pacific reach even the US' (Diamond, 2005: 371).

Jared Diamond's views matter because '*Collapse*' is a massive bestseller in the USA, as well as in other High Income Countries. It both reflects and helps to nurture popular sentiment, especially in the USA, about the perceived dangers of 'China's rise'. Its popularity spans a wide political canvas, from right-wing anti-immigrant groups to left-wing environmentalists. By linking closely China's rise with people's deep fears about the survival of the planet, the sentiments

expressed in Diamond's carefully book are immensely potent politically.

Financial fragility.

The vast and growing size of the USA's fiscal and current account deficits, international borrowing and level of personal debt, stand at the heart of the unfolding global financial fragility.

The USA and China present mirror images of each other. China has become a 'supply engine' of the global economy, while the USA has become the world's 'demand engine'. Each is growing in a deeply unbalanced fashion (Roach, 2005).

China's economic reforms have led to its deep integration with the global economy. As a proportion of GDP, foreign direct investment (FDI) is estimated to have grown from negligible levels in the early 1980s to around 35 per cent of GDP in 2004, while international trade has grown from around 18 per cent to around 70 per cent in the same period (Wolf, 2005a). For a continental-economy, these are extremely high levels, far ahead of those of the USA, and even, of Japan. A large fraction of the demand stimulus for Chinese growth has come from exports, which have grown from less than 10 per cent of GDP in the early 1980s to around 36 per cent in 2004.

The share of consumption in China's GDP fell from around 53-54 per cent in the early 1980s to 42 per cent in 2004, while the share of fixed asset investment in GDP climbed from around 30 per cent in the early 1980s, already a high level, to around 45 per cent in 2004 (Roach, 2005).¹⁰ China's heavy reliance on exports to stimulate demand tends to create a high degree of friction in international relations, compared with a growth pattern that relied to a greater degree on domestic demand. China's social security system remains extremely undeveloped. After decades of high levels of welfare security under the planned economy, the transition to the market economy has produced high levels of personal insecurity. In addition, the distribution of income has become markedly more unequal. These factors have helped to stimulate a high rate of savings in China.

In the USA, on the other hand, the picture is completely different. The share of consumption in American GDP has risen from around 65 per cent in the early 1980s to 71 per cent in 2004 (Roach, 2005). The USA accounts for only around five per cent of global population, but it accounts for no less than 35-40 per cent of global consumption. Despite having over 20 per

¹⁰ 'Investment hunger' was thought to be a key characteristic of the administratively planned economy. One of the paradoxes of the Chinese pattern of growth under economic reform is that the rate of investment remains high and rising, despite the shift towards a market economy.

cent of the world's total population, China accounts for less than 1 per cent of global consumption. The USA is 'addicted to shopping', while China is 'addicted to saving' (Roach, 2005). By 2004, the US population's savings rate stood at -1 per cent, compared with 14 per cent in Europe, 8 per cent in Japan, and no less than 35 per cent in China (Roach, 2005).

Since the early 1990s, a growing share of government debt has been bought by central banks from East Asia. China has used a large share of its rapidly rising foreign exchange reserves to purchase US Government debt. China's huge foreign exchange reserves have been accumulated especially through the hard work of China's unskilled urban workers. Since the recent explosion of world oil prices, the oil-exporting nations also have rapidly increased their holdings of US Government debt. Islamic countries are especially important among these. Islamic countries, including those in the Middle East, Central Asia, Africa and Southeast Asia account for around 74 per cent of total world oil reserves, around 44 per cent of world oil production and around 50 per cent of total world oil exports (calculated from BP, 2005). The Middle East alone accounts for 62 per cent of world oil reserves, 31 per cent of world oil production and 41 per cent of world oil exports (BP, 2005).

The level of household debt in the USA has risen remorselessly, from 60 per cent of household income in the mid-1980s to over 120 per cent in 2004 (*FT*, 16 February 2005). The rise in indebtedness has pushed household debt service payments in the USA to an all-time high of 14 per cent of disposable incomes, despite today's low interest rates. The increase has been stimulated by the bubble in the US housing market, which has greatly increased household wealth. This has been made possible by the low level of US interest rates, which have in their turn been made possible by the willingness of central banks of East Asia and the Islamic oil-exporting countries, to buy US Government debt. If house prices ceased to rise, or, even worse, if the house price bubble burst, there would be large, or even, disastrous effects on US household balance sheets.

Growth of the USA domestic and international imbalances cannot expand indefinitely. In 2004, Alan Greenspan warned: 'Net claims against resident of the United States cannot continue to increase forever at their recent pace... Continued financing of today's current account deficits as a percentage of GDP will, at some future point, increase shares of dollar claims in investor portfolios to levels that imply an unacceptable amount of concentration of risk. International investors will eventually adjust their accumulation of dollar assets, or,

alternatively, seek higher dollar returns to offset concentration of risk' (quoted in *FT*, 20 November 2004). The necessary adjustments may occur smoothly. However, it is '*quite likely that the ultimate adjustment will be both swift and brutal*' (Martin Wolf, *FT*, 8 October 2005).

If the dollar is 'dumped', the consequences would be a sharp rise in US interest rates, a 'major recession in the USA', and a surge in protectionist sentiment in the USA (Wolf, 2005a). Current asset price bubbles, including that in the housing market, are largely sustained by low interest rates, so that the impact of such a crisis would flow through the entire political economy of the USA and that of the whole world. The effects of the Asian Financial Crisis were largely confined to the countries of East and Southeast Asia. They excluded China, which, at that time was less integrated into the global financial system. Today, the USA accounts for almost two-fifths of China's exports and China holds most of its foreign exchange reserves in dollars, so that the impact on China would be enormous.

A sharp rise in American protectionism combined with a sudden decline in international appetite for US assets would have incalculable consequences, not only for the global financial system, but also for the international, and, even perhaps for military relations. As the Asian Financial Crisis demonstrated, the 'fire' of a financial crisis moves at high speed, and swiftly shifts into the economic, social and political sphere. This time, the setting will be truly global. Deep international integration has brought many benefits. It also means that it is harder to any part of the global political economy to avoid the destructive effects of a global financial crisis.

International relations fragility.

Despite the overthrow of communism in the USSR and Eastern Europe, and the rise of a market economy in China, the USA still feels intensely vulnerable in international relations. Its feelings of vulnerability were increased greatly by 9/11. It seeks to reduce its vulnerability through military and other forms of spending to protect its territory from attack, as well as by trying to nurture a world in which American values dominate. In the epoch of the global market economy, which is breaking down so many international differences, it is remarkable that the USA spends so much on instruments designed to wound and kill human beings from other countries.

Already, in the late 1990s, the USA accounted for almost two-fifths of total

world military spending. In 1999, the USA's military budget stood at US\$253 billion, compared with just US\$135 billion for NATO Europe (IISS, 1999: 37). In the wake of September 11, the US military budget rose to over US\$400 billion by 2005, while the military spending by NATO Europe stagnated. In 2006, President George W. Bush requested Congress to increase US military spending to a record level of US\$439 billion in fiscal year 2007 (FT, 7 February 2006).¹¹ Moreover, this figure did not include requests for US\$9.3 billion to maintain the US nuclear arsenal, or US\$50 billion in emergency spending to fund the wars in Afghanistan and Iraq. When all forms of military expenditure are included, it is estimated that the US is 'on a path to spend US\$2 billion per day by the end of [the Bush administration's] tenure' (FT, 7 February 2006).

Europe trails far behind the world's military superpower. Successive actions by US forces in The Gulf, Kosovo, Afghanistan and Iraq, demonstrated the massive superiority of US military forces in conventional warfare, supported by intense progress in R&D achieved by US weapons companies, especially in the application of new information technology to weaponry.¹² The Afghanistan conflict showed that the gap was getting even wider: 'The larger lesson from [the Afghanistan conflict]-and one that is stupefying to the Russian and Chinese military, worrying to the Indians, and disturbing to the proponents of a common European defence policy-is that in military terms there is only player on the field that counts' (Paul Kennedy, FT, 2 February 2002).¹³ In the invasion of Iraq, the USA fought almost single-handedly, employing massive high technology firepower to 'shock and awe' their opponents.

Human ingenuity has stimulated the advance of weapons technologies over time, mainly to meet the needs of the state, which has always been the principal customer for weapons. Nuclear weapons developed from a long sequence of scientific advances from the eighteenth century onwards, which culminated in the assemblage of a group of scientists at Los Alamos in April 1943, which included Edward Teller, Enrico Fermi and Robert Oppenheimer, that was to make the final push to build a nuclear bomb.¹⁴

The single bomb used by the USA on Hiroshima on 6 August 1945 killed 80,000 people immediately, and a further 120,000 are estimated to have died subsequently from the effects of the bomb (McNamara, 2005).¹⁵ On 9 August a second atomic bomb was dropped on Nagasaki. It instantly killed or mortally

11 The 2006 budget proposals also included cuts totalling US\$65 billion in government spending on health insurance for the elderly and other welfare entitlement programmes over the next five years.

12 This sector underwent an intense process of merger and acquisition in the 1990s.

13 European forces had almost no contribution to make beyond providing the foot soldiers to attempt to control the country after US bombing had destroyed the initial Taliban resistance. Although they were ready to support the US militarily, the NATO allies were simply not needed to fight the war in Afghanistan: 'There has always been a gap in military capabilities between the US and most of its other allies...But we are on the verge of a very dramatic disparity precisely because of the way technology is now starting to affect war-fighting doctrine' (FT 18 February 2002).

14 The long line of scientists who, mostly unwittingly, contributed to the eventual construction of the nuclear bomb stretched from Boyle in the eighteenth century, through such outstanding scientists John Dalton, Dmitir Medelejev, Frederick Soddy, Antione Bequerel, Marie Curie, Clarke Maxwell, J.J. Thompson, Ernest Rutherford, Neils Bohr, Max Planck, and Albert Einstein (Weale, 1995).

15 Robert McNamara was US secretary of defence from 1961-1968.

wounded 45,000 people (Weale, 1995: 183), and within four months of the attack, a further 30,000 people had died (McNamara, 2005).

Today the USA has a stock of 8,000 active or operational nuclear warheads, with an average destructive power that is twenty times that of the Hiroshima bomb (McNamara, 2005). Of these nuclear weapons, 2,000 are on hair-trigger alert, ready to be launched on 15 minutes warning. The USA has never endorsed the policy of ‘no first use’: ‘We have been and remain prepared to initiate the use of nuclear weapons – by the decision of one person, the president – against either a nuclear or non-nuclear enemy whenever we believe it is in our interest to do so...On any given day, as we go about our business, the president is prepared to make a decision within 20 minutes that could launch one of the most devastating weapons in the world. To declare war requires an act of congress, but to launch a nuclear holocaust requires 20 minutes’ deliberation by the president and his advisors’ (McNamara, 2005).¹⁶

16 For the detailed procedures, see McNamara, 2005.

The US Government regards nuclear weapons as central to its military strategy for ‘at least the next several decades’ (McNamara, 2005). This provides an intense incentive for other nations to develop nuclear weapons: ‘If the United States continues its current nuclear stance, over time, substantial proliferation of nuclear weapons will almost surely follow. Some or all, of such nations as Egypt, Japan, Saudi Arabia, Syria, and Taiwan will very likely initiate nuclear weapons programs, increasing both the risk of use of the weapons and the diversion of weapons and fissile materials into the hands of rogue states or terrorists’ (McNamara, 2005). In 2004, the former Secretary of Defense William J.Perry said: ‘I have never been more fearful of a nuclear detonation than now... There is a greater than 50 per cent probability of a nuclear strike on US targets within a decade’ (quoted in McNamara, 2005). McNamara commented: ‘I share his fears’.

Once a nuclear battle begins, there is no way to contain the resulting conflict. The effects of using a modern nuclear weapon are devastating, inflicting certain ‘enormous destruction on civilian life and property’, and ‘there is no guarantee against an unlimited escalation once the first strike occurs’ (McNamara, 2005). McNamara characterises the US nuclear weapons policy as follows: ‘[It is] immoral, illegal, militarily unnecessary, and dreadfully dangerous. The risk of an accidental or inadvertent nuclear launch is unacceptably high’. The only rational policy, in his view, is to ‘move promptly towards the elimination – or near elimination – of all nuclear weapons’.

3. What kind of Sino-US engagement?

China's 'peaceful rise'?¹⁷

In the 1980s, the prime goal of American foreign policy was the overthrow of the 'evil empire' in the Soviet Union. This goal was pursued through acceleration of the arms race and numerous channels of influence upon Soviet policy-makers. US policies played a significant role in the collapse of Soviet communism and the disintegration of the USSR. 'Regime change' resulted in state disintegration, with disastrous consequences for the economy and for the welfare of most Russians. The Soviet economy had only negligible linkages to the US economy. The USSR accounted for a tiny fraction of American exports and there was no investment in Russia by US multinationals. Soviet exports to the USA were trivial in scale. The collapse of the Soviet economy had a negligible impact on the US economy other than the short-term fall in military expenditure.

The Chinese and US economies have become deeply inter-twined. US consumers benefit from the explosive growth of low-priced Chinese exports. US companies and shareholders benefit from China's absorption of booming American investments and from access to the low-cost manufacturing supply-chain in China. US primary product producers (including food, oil and mining companies) benefit from exports to China, both directly from the USA and, increasingly, from production bases in other countries. US high technology firms benefit from the export of aeroplanes, medical equipment, information technology products, semi-conductors, and software. US retailers benefit from low-cost sourcing in China. The US government benefits from Chinese government purchase of its debt. This helps to keep US interest rates at a low level, which has helped to sustain the US housing bubble. This ultimately helps to underpin the growth of US personal consumption through the wealth effect and the ability of US consumers to borrow against the value of their housing wealth. 'System disintegration' in China, such as the US helped bring about in the USSR, Afghanistan and Iraq would have severe economic consequences for the USA. From this perspective it is in the interests of US business and the mass of US citizens, not to speak of the rest of the world, to support the efforts of China's Communist Party leadership to sustain the country's 'peaceful rise'.

The energy sector is a critical area of inter-action between the two systems. In some ways, China and the USA face common problems and have common incentives to solve their respective energy problems. Both of them are 'rich in

¹⁷ For a recent optimistic view of the prospects for China's 'peaceful rise', see Zheng Bijian, 2005.

coal, biomass, and garbage, but they lack sufficient supplies of oil upon which both of them heavily depend.’ (USCESRC, 2005: 171). Therefore, each of them can benefit from perfecting and employing both clean coal and biomass conversion technologies, which would tend to reduce their dependence on oil imports. There is ‘tremendous potential’ for the two nations to cooperate in these fields (USCESRC, 2005: 171). China can benefit from American assistance in a number of areas that enable it to increase the efficiency of its energy consumption and thereby tend to reduce its reliance on oil. These include energy intensity use reduction through employment of advanced machinery, clean coal technologies, coal-to-liquid technologies, and combustion efficiency improvements (USCESRC, 2005: 172). The USA and China could also work together develop and implement utilisation of ‘next generation fuels’ such as hydrogen. The USA and China have a common interest in political and social stability in Islamic countries in order to ensure stability of oil supplies.

One can visualise a scenario in which China’s involvement with the global economy becomes ever deeper, and it builds on its ancient history builds to make a fundamental contribution towards human survival in the coming century.

Science. China was at the centre of global technical progress right up until the Industrial Revolution in the late eighteenth century. Although the pace of technical progress may have slowed down somewhat after China’s medieval ‘industrial revolution’, a steady stream of significant technical advances was made thereafter through until the nineteenth century, without making the leap to a full-fledged modern ‘Industrial Revolution’. These included gunpowder, steel-making, the canal lock gate, the compass, the wheelbarrow, the windmill, mechanical clockwork, water-powered metallurgical blowing machines, water-powered trip hammers for forges, hemp spinning machines, gear wheels, power transmission by driving belt, the sternpost rudder, watertight compartments, and the crank (Needham, 1954-).

Although Chinese firms still face an intense struggle on the ‘global level playing field’, Chinese people already are making a large and rapidly-growing contribution to global technical progress. Chinese engineers and scientists constitute a large and growing fraction of the research force of leading global firms, working both in the high income countries, and, increasingly, within research institutes established by global firms in China.

There are numerous areas in which science needs urgently to produce solu-

tions in order to allow global sustainable development. Nowhere is the challenge more intense than in China. These challenge include improving human physical and mental well-being, overcoming the exhaustion of non-renewable resources, producing food in sustainable ways, and shifting the structure of consumption towards sustainable paths. China cannot simply replicate the growth pattern of today's high-income countries. Due to its vast size and explosive growth, these challenges are of unique intensity in China. The country's very survival depends on meeting these challenges.

By finding solutions to these burning problems, Chinese science and technology can make a massive contribution towards global sustainable development, and China can resume its place at the centre of the global technical progress.

State and market: 'Using the past to serve the present'. Within the evolving fabric of globalised capitalism there are innumerable institutions, both governmental and non-governmental, local, national and international, through which people strive to assert collective control over the global economy. Although they are far from fully developed, numerous mechanisms are emerging that use market forces to stimulate behavioural responses by businesses, in order to meet collective human needs for system survival.

Throughout its own long history the Chinese state both stimulated and regulated the market economy. Alongside vibrant market development, the Chinese state guided economic activity through such mechanisms as control over the money supply, commodity price stabilisation, constructing irrigation and transport infrastructure, organising famine relief, regulating urban planning, and spreading knowledge. In periods when the state operated effectively, the economy and society function harmoniously.

China's long historical experience in balancing the interests of state and market can provide a source of inspiration for the global community as it searches for a way to establish a suitable balance between society and economy.

Ethics. The way in which humans choose to exercise that intelligence is governed by their ethics. Neither the extreme pursuit of negative freedoms within parts of the communist world in the twentieth century, nor the extreme pursuit of negative freedoms under US-led globalisation in its early twenty-first cen-

ture form, offers a solution. From ancient times to the present day, philosophers have sought to find a 'middle way' between competing extremes as the ethical foundation for the good society. If they are to cooperate internationally to solve the challenges created by capitalist globalisation, human beings must find a common ethical ground from across the different world civilisations, 'using the past to serve the present' to form a common ethic for global survival, which answers people's deep spiritual needs from the basis of a simple rational philosophy that all people can understand.

The most influential thinkers of all cultures have addressed the fundamental issues of the ethical foundations for human survival. Among the most enduring of these are Confucius, Aristotle and Adam Smith. Each of them is deeply spiritual, attempting to address human being's deepest fears and needs. Each of them is based on humanistic rationality, which is complementary to, rather than substitutes for the main religious belief systems.¹⁸ At the core of their common search for an ethic to guide human beings towards a good life has been the concept of benevolence. They agree that the pursuit of wealth, social position and ever-increasing consumption is not the path to human happiness. They share the view that a good society is one in which social harmony is achieved through the whole people sharing a common view of social justice. They each believe that education is critically important for inculcating the ethics that form the foundation of the good society. They share the view that the only rational human goal is happiness, and that this is most completely achieved through the search for tranquillity, not the relentless pursuit of material consumption and pleasure.

Whether the human species as a whole can grope its way towards the ethical foundations necessary for the species to survive is uncertain. China can build on its own history and culture to contribute to a global ethic of human survival in the Twenty-First century.

China and the world at the crossroads. The challenges that are faced by human beings are the product of people's own purposive activities, expressed mainly through the economic system. It is within their collective power to resolve these contradictions. The very depth of the challenges they now face may shock them into the action necessary to ensure the survival of the species. Alongside human beings competitive and destructive instincts are their instincts for species survival through cooperation. However great the challenge may be,

¹⁸ For example, at the height of early Islamic civilisation, from the tenth to the twelfth century, Muslim scholars preserved the intellectual heritage of Aristotle, and combined this with their own commitment to Islam and the Koran (Braudel, 1993, 81-4). Muslim philosophy was 'trapped between Greek thought on the one hand and the revealed truth of the Koran on the other' (Braudel, 1993, 82)

human beings have the capability to solve the contradictions that are of their own making. It may only be the approaching 'final hour' which finally forces human beings to grope their way towards globally cooperative solutions.

China stands at a crossroads in its development. China's contribution to human survival must be part of a global, cooperative effort. For the first time capitalism has become truly global. The challenges it creates are global, and so too must be the solutions to those challenges. China's leaders are trying to build a harmonious development path, which establishes a balance between domestic and international, inland and coastal, urban and rural, society and economy, and nature and man.

If China is successful in striking these balances, and solving the urgent development problems that it faces, then the prospects for the whole of humanity are bright. If it fails, the prospects are bleak for the whole world.

Yellow Peril?

However, it is possible to envision a very different scenario for 'China's Rise'.

American fears of China.¹⁹ Periods of large changes in the relative power of nations are difficult for the international relations system to handle. For the world today, the central relationship that needs to be handled effectively is the combination of 'China's Rise' and the relative decline of the USA, in the context of the intensifying inter-action of their economic systems. Each has its own intense national interests and sense of national identity. China is striving to recover the place at the centre of the world economy and civilisation that it lost in the eighteenth century. The USA faces the challenge of dealing with inevitable relative decline. This complex relationship spills over into innumerable other spheres of international relations, including every part of the world.

Samuel Huntington's study *Who are we?* (2004) sets out starkly the choices that he considers the USA faces today. Huntington he has done more than any other individual to shape the current American establishment's view of international relations, notably through his book *The clash of civilisations* (Huntington, 1996).

Huntington believes that the USA faces serious threats to its national identity and unity from various directions 'Americans should recommit themselves to

¹⁹ Three recently published best-selling books by American authors help to understand widespread fears in the USA in relation to 'China's rise'. These are Samuel P. Huntington's 'Who are we' (Huntington, 2004), Jared Diamond's 'Collapse' (2005), and Thomas Friedman's 'The world is flat' (Friedman, 2005). They both reflect and nurture deep fears and misunderstandings of China.

the Anglo-Protestant culture, traditions, and values that for three and a half centuries have been embraced by Americans of all races, ethnicities, and religions and that have been the source of their liberty, unity, prosperity, and moral leadership as a force for good in the world' (Huntington, 2004: xviii). These include the rise in domestic social inequality, the rapid expansion of 'Hispanisation' of American culture, and 'globalisation' of the American elite. Historically, the existence of an external enemy has played a central role in helping to create American national unity out of a people who came to the country from all over the world. America's sense of national unity was deeply undermined by the collapse of the 'evil empire' of the former USSR: 'The absence of a significant external threat reduced the need for a strong national government and a coherent, unified nation' (Huntington, 2004: 265). Much of American foreign policy debate involved identifying who might be the new 'enemy': 'The ideal enemy for America would be ideologically hostile, racially and culturally different, and militarily strong enough to pose a credible threat to American security' (Huntington, 2004: 266).

For Huntington, there are two possible enemies who might fulfil this role. First is the 'Muslim' world: 'Muslims increasingly see America as their enemy. If that is a fate Americans cannot avoid, their only alternative is to accept it and to take measures necessary to cope with it' (Huntington, 2004: 365). Huntington considers that the 'antagonism of Muslims towards the United States' stems partially from the USA's support for Israel, but that it 'also has deeper roots in the fear of American power, envy of American wealth, resentment of what is perceived as American domination and exploitation, and hostility to American culture, secular and religious, as the antithesis of Muslim culture' (Huntington, 2004: 364).

Huntington considers that the other possible candidate for this function is China, which he describes thus: '[China is] still communist in theory if not in economic practice, clearly a dictatorship with no respect for political liberty, democracy, or human rights, with a dynamic economy, an increasingly nationalistic public, a strong sense of cultural superiority, and among its military and some other elite groups, a clear perception of the United States as their enemy.' (Huntington, 2004: 267). Huntington points out that the most dangerous threats to the USA arose when 'its fascist enemies, Germany and Japan came together in the Axis of the 1930s and 1940s', and then in the 1950s 'when its communist enemies, the Soviet Union and China, formed a coalition': 'If a comparable

threat emerges, China will be at its core' (Huntington, 2004: 267).

For Huntington, 9/11 'dramatically symbolised the end of the twentieth century of ideology and ideological conflict', and the beginning of a new era in which 'people define themselves primarily in terms of culture and religion' (Huntington, 2004: 344). In his view the 'real and potential enemies of the United States now are religiously driven militant Islam and entirely non-ideological Chinese nationalism' (Huntington, 2004: 344). In this environment, Huntington believes that for Americans 'the religious component of their identity takes on a new relevance' (Huntington, 2004: 344).

The US-China Economic and Security Commission (USCESC) was set up in October 2000 by the US Congress specifically to investigate the implications for the USA of China's growth.²⁰ The Commission's mandate is to 'monitor and investigate and report to Congress on the national security implications of the bilateral trade and economic relationship between the United States and the People's Republic of China' (USCESRC, 2005: iii). The Commissioners are all appointed by Congress. The Commission has produced a succession of reports, each of which expresses deep apprehensions about the implications of China's economic growth for the USA, including the impact on US employment and conditions of work, and upon the USA's technological and military superiority.

On 30 January 2004 the Chairman of the Commission introduced the Hearing held in South Carolina in the following fashion: 'We're honoured to have [Senator Graham of South Carolina] here today to appear before the Commission. We had the good fortune of hearing from him at an important hearing that we convened on September 25th where he provided a forceful presentation on a number of issues that we're going to be addressing here. And, if you'll indulge me Senator, I can't resist sharing with our audience just a couple of comments you made...in what we would regard as plain talk and powerful points, one after the other. It was really an extraordinary presentation that I commend to all of your attention. But one of the points that Senator Graham made at that time was that it is hard to have free trade if you do not have free speech. "Somebody in our government has got to come to grips with the idea that we are dealing with a country that cheats and is a communist dictatorship and what do you expect. They are cheating and they are taking the money to build up their military. It lose, lose.'" (USCESRC, 2004a: 1-2).

²⁰ The Commission was established by the US Congress in October 2000 by the Floyd D. Spence National Defense Authorisation Act for 2001 sec. 1238, Public Law 106-398, 114 STAT. 1654A-334 (2000) (codified at 22 U.S.C., sec. 7002 (2001), as amended, and the 'Consolidated Appropriations Resolution of 2003', Public Law 108-7, dated February 20, 2003. Public Law 108-7 changed the Commission's title to US-China Economic and Security Review Commission.

In his introductory comments to the same Hearing, Vice-Chairman C. Richard D'Amato commented: 'If you can figure out how to integrate a Chinese communist dictatorship with over a billion people who go where they're told to go; who work in the industry they're told to work [in]; who get paid what they're told they're worth; who have no way to answer back, if you can figure out how to integrate that into the world economy, please let me know' (USCESRC, 2004a: 9).

There is a powerful set of interests that believes serious conflict with China is unavoidable. In the early days of the George W. Bush administration, Joseph Cirincione, of the Carnegie Endowment warned: 'There are many people in this [Bush junior] administration who think that a war with China is likely, perhaps even inevitable in the next 20 or 30 years. [They think] China will challenge us [and] we'd better be ready for it' (quoted in *FT*, 20 August 2001). Henry Kissinger warned: The hawks see China 'as a morally flawed inevitable adversary' and believe that the US should act 'not as a strategic partner, but as it treated the Soviet Union during the cold war, as a rival and a challenge'. General Brent Scowcroft, former security advisor to two republican administrations (Gerald Ford and George Bush senior), comments: 'If there is a real division within this [Bush junior] administration, it is probably on China. There is a division between those who see China as inexorably developing into the primary security threat to the US, and those who feel China is transforming rapidly but...that its been overwhelmingly positive' (quoted in *FT*, 20 August 2001). These division persisted throughout the first and second Bush administrations. 'Realists' in American policy-advice circles, such as John Mearsheimer of Chicago University, argue that the USA will 'seek to contain China and ultimately weaken it to the point where it is no longer capable of dominating Asia' (Mearsheimer, 2005). Mearsheimer considers that 'the USA is likely to behave towards China much the same way it behaved towards the Soviet Union in the Cold War'.

In 2005, when CNOOC (China National Offshore Oil Company) made a bid to acquire Unocal, the American headquartered oil company, it 'sailed into a perfect storm'. It released an outpouring of hostility towards China. The *Financial Times* reported the resulting furore as follows: 'Congress was furious about the US-China trade deficit and the strength of the *renminbi*, the supposed loss of American jobs overseas, gas prices, China's military build-up, its continued denial of political and religious freedoms and its acquisition of natural resources round the world. The disparate issues converged on CNOOC. One of the most

critical issues for the world is that the US should permit and encourage China's peaceful rise. Killing Chinese takeovers makes one doubt whether the US understands this.' (*FT*, 3 August 2005). William Reinsch, President of the US National Foreign Trade Council observed: 'We are in a time and place where every single one of these deals is going to go through extra scrutiny, because the deals give fodder to the view that China is the enemy' (quoted in *FT*, 3 August 2005).

The USA's Annual Report to Congress on 'The Military Power of the People's Republic of China' (2005) concluded that China will not be ready to fight even a 'moderate-sized adversary' until 2010, and that the PLA is 'presently unable to compete directly with other modern military powers'. There are elements in US foreign policy who believe that China is at a fragile stage in its development, and that it should be restrained before it becomes too powerful: 'We feel we've got China on the run and now is the time to push hard'.

The USA fears that China's rise will transform fundamentally the balance of world economic and military power. President Bush warned China: 'In pursuing advanced military capabilities that can threaten its neighbours in the Asia Pacific region, China is following an outdated path that, in the end, will hamper its own pursuit of greatness. It is time to reaffirm the essential role of American military strength. We must build and maintain our defences beyond challenge...Our forces will be strong enough to dissuade potential adversaries from pursuing a military build-up in hopes of surpassing, or equalling, the power of the US' (quoted in *FT*, 21 September 2002). Following 9/11, the consensus among the inner core of Bush administration shifted to the view that 'in the long-term the US would only find security in a world in which US values were widely held and spread' (*FT*, 6 March 2003).

There is a high probability that the world will encounter a deep financial crisis in the next few years. The USA and its financial institutions are likely to be at the centre of this crisis. A major financial crisis would produce a deep economic crisis in the USA as the dollar collapsed, interest rates rose and house price bubble was punctured. This could quickly become transformed into a social crisis. The mass of ordinary citizens would experience a bewildering collapse in their wealth, and be forced to sharply reign in their levels of consumption and restore their savings. In the face of such a deep crisis, there would be deep anger, frustration and confusion. The temptation to look for a scapegoat

under such circumstances is high. This could quickly lead to an international relations crisis.

China could form the focal point for American popular anger. China could be accused of holding the USA to ransom through the large amounts of US government debt that it holds. China could be accused of manoeuvring its international relations to attempt to secure scarce supplies of scarce fossil fuels, including establishing close relations with America's enemies, such as Iran, Venezuela and Sudan. China could be accused of unfair export policies to build up its foreign exchange earnings, which were in turn being used as a 'military instrument' against the US people. China could be accused of nurturing its exports at the expense of exploiting its impoverished mass of rural-urban migrants. China could be accused of polluting the global environment through the reckless use of fossil fuels to stimulate its growth. China could be accused of luring US corporations into the country, encouraging the 'Sinification' of American firms and American business leaders. China could be accused of turning a blind eye to the unethical behaviour of its firms, as demonstrated by their unwillingness to list on the New York stock market and subject themselves to American standards of corporate governance. The American people could be reminded that their future was in the hands of a country run by a Communist Party with 69 million members.

The essence of a financial crisis is its speed. In the modern world, as the Asian Financial Crisis demonstrated vividly, financial events can transmute at high speed into economic, social and political crises. In the US-China relationship, there is a high potential for this to ricochet into an international relations crisis, and even into a military crisis.

Prospects for military conflict. The great wars of the twentieth centuries were not fought between capitalism and communism. The 'Cold War' largely remained a 'cold' war.²¹ Both the First and the Second World Wars were fought primarily between capitalist countries, with the USSR dragged unwillingly into the latter only after it was invaded by capitalist Germany. These great conflicts were intimately associated with nationalism and the struggle for economic power, especially for control of world resources and markets. As the former communist planned economies move at different speeds towards the market economy, the struggle for global markets and scarce resources is intensifying. This struggle is not fundamentally ideological. It is concerned with establishing

²¹ Korea and Vietnam are obvious and important exceptions, but the scale of these wars was dwarfed by the larger military conflicts of the First and Second World Wars.

national security for each country's economic system through secure supplies of key resources, especially, but not exclusively, energy. As the world moves towards unified markets and global capitalism, the possibility of military conflict increases rather than diminishes. The most shocking of modern wars, which ended a long period of peace between the European great powers occurred at the high point of the previous period of globalisation. The world is in the middle of one of the 'great historic changes in relative power', and 'historically such changes have mainly led to conflict' (Wolf, 2005a). Martin Wolf warns: 'Ours is the second era of globalisation since the dawn of the industrial revolution. The first began in the second half of the nineteenth century and ended with a series of political and economic disasters in the first half of the twentieth century. If such calamities are to be avoided, much will depend on relations between the US and a rising China...Peaceful and cooperative relations are perfectly possible...[b]ut they are not inevitable' (Wolf, 2005b).

The modern capitalist epoch has seen military technology raised to new heights, predominantly supplied by immensely effective research and development capabilities of large weapons manufacturers and firms within their supply chains. The nation state remains the fundamental framework within which economic development proceeds. Nationalism remains an immensely powerful force. The greatest threats to world peace arise not from ideological conflict but between 'capitalist' and 'non-capitalist' countries. Rather, they arise from the possibility of conflict between market economies, and their intense clash of interests. The most serious threat is posed by the possession of vast stocks of nuclear weapons by the world's leading capitalist economy. One of the most sophisticated products of human beings' intelligence, developed out of a large part of modern science, has the potential to destroy the human race. The world's most successful capitalist country refuses to give up these diabolical weapons, despite the incredible danger that they pose to the human species, and their pointlessness as a means of national self-defence. This raises deep issues about the psychological consequences of the individualistic, competitive, insecure, masculine-dominated, capitalist economy, and its suppression of human being's capacity to trust, cooperate and act in a fashion that is rational for the whole of humanity. A random disturbance to the global system, such as a financial crisis, especially if it attacks the USA, has the potentiality to spiral at high speed into a global nuclear catastrophe.²²

Even a restricted list of 'globally transformational wars' (ones that had a major

22 The concrete ways in which this might happen cannot be predicted. One such sequence of events formed the basis for the amazing futuristic 'novel', *Yellow Peril*, written by the Chinese author, Wang Lixiong. The most famous war in history, that between Greece and Troy, happened for the most prosaic of reasons, namely, the fact that Helen was carried off to Troy by Paris. In order to re-capture Helen from the Trojans, the warriors of both races fought valiantly. Huge number were seriously wounded or lost their lives, fighting for the most trivial of reasons. Vaclav Smil (2005) warns that 'any unwillingness or inability to imagine the locale or the cause of the next grand transformational conflict is no argument its rather high probability': 'In 1790 no German high officer or Czarist general could suspect that a diminutive Italian from Ajaccio, who soon became known to his troops as *le petit caporal*, will set out to redraw the map of Germany before embarking on a mad foray into the heart of Muscovy. In 1840 the Emperor Daoguang could not have dreamt that the dynastic rule that lasted for millennia will come close to its end because of a failed candidate of the state Confucian examination who came to think of himself as a new Christ. And in 1918 the victorious powers, dictating a new European peace in Versailles, would not have credited a destitute, neurotic would-be artist and a gassed veteran of the trench warfare from Munich with powers large enough to undo, in exactly two decades, their new order and plunge the world into its greatest war' (Smil, 2005).

impact on world affairs) adds up to 42 years of conflicts in the past two centuries. They have had a conservatively estimated total (combatant and civilian) casualties of around 95 million, with a mean recurrence rate of about 35 years, 17 million deaths per conflict, and implied probability of a new conflict of this category at roughly 20 per cent during the next 50 years.²³ Vaclav Smil's account of the history of mankind's modern record of mutual military destruction concludes: '[W]ars are like earthquakes or hurricanes whose specific time and place we cannot predict but whose recurrence we must expect... [W]arring nations bang against each other with no more plan or principles than molecules in an overheated gas'. (Smil, 2005).

²³ Smil estimates that the probability of a 'new transformational war' is 'one or two orders of magnitude higher than that of a globally destructive natural catastrophe' (Smil, 2005).

Conclusion: Groping for a way forward.

Since ancient times the exercise of individual freedoms has been inseparable from the expansion of the market, driven by the search for profit. This force, namely capitalism, has stimulated human creativity in ways that have produced immense benefits. As capitalism has broadened its scope in the epoch of globalisation, so these benefits have become even greater. Human beings have been liberated to an even greater degree than hitherto from the tyranny of nature, from control by others over their lives, from poverty, and from war. The advances achieved by the globalisation of capitalism have appeared all the more striking, when set against the failure of non-capitalist systems of economic organisation.

However, capitalist freedom is a two-edged sword. In epoch of capitalist globalisation, its contradictions have intensified. They comprehensively threaten the natural environment. They have intensified global inequality. They have stimulated a high degree of instability in global finance. The world's dominant economic, political and cultural power refuses to dismantle its vast stock of nuclear arms, sufficient to obliterate the entire global civilisation. It benefits in numerous ways from global capitalism. It also feels under intense threat, both internally and externally from those same forces.

The present stage of development of global capitalism has produced in even more intense form the contradictions latent within the system. As human beings have taken to new heights their ability to free themselves from fundamental constraints through the market mechanism, so they also have reached new depths in terms of the uncontrollability of the structures they have created. Global capitalism has created uniquely intense threats to the very existence of

the human species at the same time that it has liberated humanity more than ever before from fundamental constraints. The Astronomer Royal, Lord Rees, believes that ‘the odds are no better than fifty-fifty that our present civilisation on Earth will survive to the end of the present century’ (Rees, 2003: 8).

The capitalist system is the product of the collective exercise of human intelligence. The way in which people choose collectively to exercise that intelligence is governed by their ethics. Ethics are the ‘pole star’ to guide humanity on its journey through history. The possibilities for a sustainable future for human beings is, in turn, deeply related to human being’s psychological needs. There have, since ancient times, been sharply polarised views of the fundamental human needs and the ethical systems corresponding to those needs.

The contradictory character of human psychology has been recognised since the great thinkers of antiquity. One may interpret Homer’s great legends, *The Odyssey* and *The Iliad*, as concerned respectively with the ‘life instinct’ and the ‘death instinct’. The former was a joyous celebration of human creativity and the pleasure of the human voyage of discovery. The latter was a remorseless pageant of horror and mutual destruction by men motivated by ‘heroism’. Sigmund Freud, the founder of modern psychology, also came to the conclusion that the fundamental driver of human psychology was the struggle between the constructive, loving, ‘life instinct’ (‘Eros’), and the destructive, selfish, death instinct (‘Thanatos’). The ‘life’ instinct came from man’s sense of his place within an infinite realm of being. The ‘death’ instinct came from man’s deepest fears, especially the fear of death itself. The death instinct inclined people to distrust and compete with their fellow beings, while the life instinct inclined people to trust and cooperate.

If humanity cannot find a ‘mean’, its prospects for survival are bleak. The destruction of human civilisation may arise either from the internal self-destructiveness of extreme free market individualism, or from the nihilistic response of those excluded and angered by the globalisation of the free market.

The challenges that are faced by human beings are the product of people’s own purposive activities, expressed mainly through the economic system. It is within their collective power to resolve these contradictions. The very depth of the challenges they now face may shock them into the action necessary to ensure the survival of the species. Alongside human beings competitive and destructive instincts are their instincts for species survival through cooperation. How-

ever great the challenge may be, human beings have the capability to solve the contradictions that are of their own making. It may only be the approaching 'final hour' which finally forces human beings to grope their way towards globally cooperative solutions.

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Peter Nolan has for many years been closely involved with China's policy discussions about the integration of China with the global economy and business system. He spoke at a series of key meetings held in Beijing in 2000/01. These involved Chinese and international political and business leaders, who met in order to evaluate the impact of China joining the WTO. He has testified before the US Congress' US-China Economic and Security Review Commission.

In their January 2000 report on the China Big Business Programme, *The Financial Times* commented: "Peter Nolan knows more about Chinese companies and their international competition than anyone else on earth, including in China."

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