The World Under Pressure: How China and India Are Influencing the Global Economy and Environment

Carl J Dahlman


The World Under Pressure: How China and India Are Influencing the Global Economy and Environment, written by Carl J Dahlman, is a must-read for anyone who wishes to truly understand and resolve some of the pressing issues affecting the global economy and the environment, most notably the growing impact of developing economies such as China and India. Dahlman’s extensive experience as an economist at the World Bank, as well as his knowledge of China and India, are well integrated in this meticulously comprehensive analysis of the evolution of nations and their impact on economic and environmental sustainability. While the book focuses on the impact of China and India, the lessons learned here can easily be applied to future developing as well as developed nations. The World Under Pressure: How China and India Are Influencing the Global Economy and Environment demonstrates that, in order to solve the complex, multidisciplinary issues associated with ensuring a sustainable environment and stable economy, the skilled problem solver must combine an understanding of the historical context under which such issues arise with a multidisciplinary and methodical approach to measured progress.

Chapter 1 provides a comprehensive, statistical analysis of the growing power of China and India among other world economies. Together, these two developing nations represent 40 per cent of the world’s population. China has steadily transformed from a state-controlled economy to a largely market-driven economy. It is now considered the world’s manufacturing centre. India has leveraged its strengths and exploited the information revolution to become a global centre for outsourced information technology services. In addition, both China and India have shown increased global output, trade exports and a rise in the consumption of energy and resulting rise in carbon dioxide emissions. All these advancements require people and energy. Increased population growth and use of fossil fuels create increased carbon dioxide emissions, a direct cause of climate change. Dahlman states that while the rise of such developing nations may be good for the world economy, it creates power shifts and frictions within the existing global systems. The world also faces a new global constraint, namely the ‘limited capacity of the environment to absorb increasing carbon dioxide emissions that are a by-product of economic development and... reliance on fossil fuels’ (p 2). Dahlman concludes Chapter 1 by arguing that a historical
review of power shifts combined with new environmental constraints mean the current global system is no longer sustainable. More cooperation and behaviour modification are needed in terms of global governance systems, enforcement of environmental standards, trade and finance to ensure that shifting power trends take into account the constraints of climate change and the need for environmental sustainability (p 7).

Chapter 2 provides analytical insights into the history of power shifts and the implication for key issues related to economics and the environment. Chapter 2 begins with Dahlman’s comparison of three contrasting theories of international relations, namely realism, liberalism/neo-liberalism and constructivism. Key to this analysis is the use of the realist theory of power to analyse the rise and decline of nations that was developed by Robert Gilpin in *War and Change in World Politics* (1981). Gilpin sees an important distinction between changes within the global system, which are generally less disruptive because a new power demands more influence within the existing global system, and changes to the global system, which are more disruptive because new powers may demand changes to the entire system, thus leading to potential wars of power. To date, any such changes have been within the global system. The main thrust of the book is through the neo-liberal approach, which recognises the role of the state yet also emphasises that the state is no longer the sole actor. This view seems more in line with current economic and political reality, especially considering the growing global interdependence of trade, international finance, multinational corporations and environmental constraints. The remainder of Chapter 2 sets out the analytical framework for the book, focusing on the impact of seven key elements. These key elements are:

1. economic size/geopolitical power;
2. international trade;
3. international finance;
4. technology;
5. environment;
6. security and military power; and
7. global governance.

Dahlman provides a detailed and well-supported analysis of China and India’s performance and current status in each of these seven elements. He concludes the analysis with the view that historical trends show that power shifts in nearly all cases, except one, have resulted in war. Dahlman sees the US as losing momentum in all key areas necessary to maintaining its current status as a global power while the rapidly evolving reforms in
China and India are increasingly playing a greater role in shaping the global system and affecting both the world economy and the environment. The key message of Chapter 2 is that the sharp shifts in the economic size of major developing countries over the last 30 years have both contributed to and are a key factor for resolving the complex issues of economic, geopolitical and environmental stability.

Chapters 3 and 4 provide a detailed discussion on the rise of China and India, prospects for future growth and the major challenges that China and India still face. Dahlman analyses their historical evolution as well as their similarities and differences in trade, labour, politics, education, foreign direct investment and adaptation to technology. Most notably, China and India have been able to grow rapidly because of high growth in labour, capital and total factor productivity resulting from, for example, the ability to ‘draw on technology existing in the advanced economies and play catch-up’ (p 92). To date, this catch-up has been mainly through imitation rather than innovation, although the trend is shifting towards greater innovation. While China and India have different governance systems, cultural nuances and political frameworks, both countries have benefited greatly from integration in the world market, leading to greater access to global knowledge in order to foster technological advancement. Dahlman’s analysis shows that, while the 2008–2009 financial crisis negatively affected both China and India in terms of reduced international finance and demands for imports from developing countries, both countries are poised for good growth prospects between 2011 and 2015. Despite good growth prospects, both China and India face similar challenges including growing personal incomes combined with regional inequalities as measured by the Gini coefficient, corruption and environmental degradation due to growing population trends, increased carbon dioxide emissions, poor environmental resources per capita and water shortages due to global warming (pp 80–83). In the concluding sections of Chapter 4, Dahlman discusses how both countries are addressing the foregoing challenges and the factors leading to China and India’s competitiveness. According to Dahlman, both China and India are moving from imitation to innovation. In particular, China’s National Medium and Long Term Plan for the Development of Science and Technology (2006–2020) specifically targets increased expenditure on research and development in 16 strategic industries. India is also increasing investment in research and development, especially in scientific and technical capabilities. Furthermore, both economies will continue to leverage their increased populations and large educational systems to increase skills and technological capabilities, thus putting restructuring pressure on the world (p 111).
Chapter 5 examines the impact of China and India’s growth in trade on other countries. In particular, Dahlman addresses China’s contribution to global imbalances in trade, foreign investment and currency. Next, Dahlman discusses the impact of increased foreign direct investment into India and China. Dahlman also addresses the issues of unfair competition caused by intellectual piracy and restricted access to China and India’s domestic markets, as well as the geopolitical implications of China’s growing influence on other countries, especially its influence on countries in the Asia-Pacific region. First, while both China and India have a positive influence on the world economy in the form of reduced prices for goods and services, as well as creating a larger market for imports, they also create strong competition for other markets, especially countries that are less developed. Secondly, China today has the world’s largest trade surpluses while the US has large trade deficits. This potentially leads to the devaluation of the Chinese renminbi, giving it an unfair advantage in exports and creating trade tensions with the US and other economies. Similarly, both China and India are becoming large foreign investors, increasing their leverage by purchasing natural resources and high-technology companies. Issues of intellectual piracy, reverse engineering, preferential treatment of domestic companies and stealing foreign technology continue to plague both countries.

Chapter 6 looks specifically at the impact of China and India on environmental sustainability and natural resources. The exponential growth of these countries has major implications for the global environment. Dahlman first looks at the current state of China and India’s resource endowments and compares resource availability and use, specifically as related to carbon dioxide absorption. For both China and India, there are severe land constraints, the agriculture of both economies is more labour intensive than their BRICS partners, and both economies are water-poor and lack sufficient natural resources on a per capita basis. Owing to limited arable land, there is heavy use of fertilisers, which not only means extensive use of energy and water but also leads to increased water pollution. Next Dahlman looks at the global environmental sustainability problems resulting from the rapid growth of India and China from the standpoint of its ecological footprint, which ‘measures the demand of human activity on the biosphere’ (p 161). Dahlman concludes that, because China and India have such large populations and are resource poor on a per capita basis, they have large deficits with respect to their ecological footprints. In essence, both countries are growing three or four times faster than the world average. This growth is both resource and environment intensive, resulting in exponentially increased energy demands and carbon dioxide emissions between 2008 and 2025 (pp 162–163). Chapter 6 also provides an insightful analysis on
why China and India, despite such growth and influence, have perhaps created a stalemate with respect to climate change and limits on carbon dioxide emissions. In essence, Dahlman states that a climate change deal is at deadlock and has become a zero-sum game because of cost, equity, efficiency, competitiveness and the problems of collective action, especially among the largest emitters of carbon dioxide, namely the US, China and India, whose collective emissions by 2035 will be more than the rest of the world’s total emissions in 1990 (p 171). Chapter 6 concludes with some alternatives to resolving climate change deadlock, first by reframing the dialogue from a zero-sum game to a positive-sum game and then making greater investment in developing and commercialising better energy technologies.

In Chapter 7, Dahlman returns to the seven elements discussed in Chapter 2 and delivers a comprehensive assessment of the relative importance of China and India across the seven elements, specifically the changes caused by the rapid rise of these economies and whether existing institutions can accommodate such changes. Chapter 7 provides a very useful summary in the form of a table that sets out each of the seven elements, the new, major issues under each of the seven elements, the current institution/mechanism that exists for dealing with these issues and the missing areas or weaknesses of the existing institutions or mechanism. From this analysis, Dahlman articulates three major problems with the existing international governance system, namely ‘an increasing power vacuum in global governance, outdated global governance institutions, and missing institutions or mechanisms for global governance’ (p 185). Each of these is discussed at length in relation to the increasing frictions between China, India and the rest of the world across each of the seven elements. These frictions include the risk of trade wars, resource wars, resource nationalisation, climate change and geopolitical tensions such as the battle over unclaimed or disputed territories. Chapter 7 concludes with a highly relevant set of recommendations for the United States in dealing with increased competition, developing a long-term strategic vision and regaining or maintaining a stronger leadership position in terms of trade, competitiveness and global governance.

Chapter 8, the final chapter of the book, provides perhaps the most valuable ideas on how the world can adjust and thrive in the face of China and India’s rising power. Dahlman first sets out four plausible scenarios across a vertical axis, measuring the degree of environmental sustainability, and a horizontal axis, measuring the extent to which the current global economic system is integrated. According to Dahlman, we are currently in scenario one, namely an unsustainable and undesirable scenario in which there is an integrated global economic system but an environmentally unstable system owing to strong environmental pressures created by the rise of China and
India. Dahlman believes that more cooperation and progress are required in order to move to scenario four, which requires ‘global cooperation to create a sustainable and equitable global system’ (p 211). This involves addressing the gaps in each of the seven elements discussed above, increased aid for poor countries and more sustainable development strategies (p 211). The remainder of Chapter 8 is dedicated to specific actions that nations, in particular China and the US as the world’s largest economies, can take to ensure a more sustainable and equitable global system.

In conclusion, *The World Under Pressure: How China and India Are Influencing the Global Economy and Environment* is one of the most comprehensive, well-supported, reader-friendly, insightful and multidisciplinary approaches to how the world can leverage historical trends and lessons of the past to construct a sustainable future that balances economic growth with environmental protection.

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