

## **Immigration Patterns of Skilled Workers in Malaysia: a Sectoral Analysis<sup>#</sup>**

TAN Chuie Hong \*, A. Solucis SANTHAPPARAJ and HO Sin Ban  
*Multimedia University*

**Abstract:** Rapid economic development in Malaysia has resulted in fundamental changes in the immigration patterns of skilled workers. This paper studies the changes that have occurred in the immigration patterns of skilled workers in Malaysia during 1998-2004. Skilled immigration flows to Malaysia from developed and developing countries are much higher in the services sector compared to the rest of the sectors. The manufacturing sector is the top option for the skilled workers from least developed countries. This analysis is supported by the notion that a lack of experts in developing countries causes immigration patterns of skilled workers to flow towards the developing countries. This process also leads to the transfer of technology and know-how from the more advanced countries to less developed countries.

Keywords: Immigration patterns, skilled workers, sectoral analysis, Malaysia  
JEL classification: F22, J61

### **1. Introduction**

Globalisation and structural change in the Malaysian economy have resulted in fundamental changes in skilled immigration patterns. Malaysia is moving away from production and export of agricultural products, and labour-intensive manufacturing products like foods and textiles, towards capital-intensive products such as computer chips, consumer electronics and high-tech capital goods. The shift toward knowledge-intensive and technical skills has increased the demand for skilled workers; hence the inflow of skilled migrants to overcome skilled labour shortages in selected sectors (Lim 1988).

The number of skilled immigrants has been increasing with economic growth, international division of labour and foreign investment. The composition of migrants too has changed, reflecting changes in economic structure, investment and trade patterns. In colonial and post-colonial days, many of the professionals who worked in plantations and tin mines were from Britain. Today Japanese, Taiwanese, South Korean and Singaporean managers are employed in manufacturing, petroleum and the services sectors.

This paper aims to study the changes that have occurred in the immigration patterns of skilled workers from the developed countries, developing countries and least developed countries to Malaysia for the years 1998-2004. Developing countries are divided into five sub-regions: Asia Pacific; Middle East and North Africa; Latin America and Caribbean; Europe and Central Asia as well as Sub-Saharan Africa and South Africa. Justifications are provided for the observed patterns and consideration is given to their implications for future development in Malaysia. The immigration data are gathered from the Immigration

\* Corresponding author: Tan Chuie Hong, Multimedia University, 63100 Cyberjaya, Malaysia  
Email: [chtan@mmu.edu.my](mailto:chtan@mmu.edu.my)

<sup>#</sup> The authors would like to thank the Immigration Department of Malaysia for supplying the data.

Department of Malaysia. The rest of the paper is organised as follows. Section 2 presents a theoretical perspective and Section 3 studies the overall immigration patterns. Section 4 analyses sectoral immigration trends while Section 5 introduces the link between the state of development and sectoral immigration patterns. Section 6 discusses and concludes the paper.

## 2. Theoretical Perspective

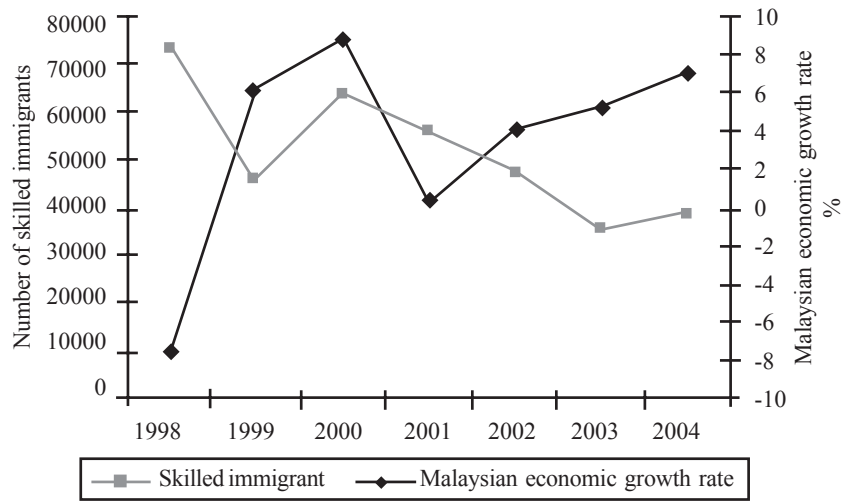
Much of the literature on migration draws on the work of Chenery and Syrquin (1975) who emphasised the importance of economic development as a key determinant of migration. The 1970s saw growth in the movement of skilled migrants from less developed countries to the oil rich states of the Middle East and to rapidly growing economies such as Singapore, Hong Kong, Taiwan and South Korea. The continued development of these countries is expected to draw more migrants. In recent decades, there has been an increase in emigration of skilled workers from industrialised nations (the US, Canada, Australia, Europe) to developing countries, often temporarily as part of the expansion of multi-national corporations (MNCs) to fulfill the contracts with governments of the developing countries or as self-employed consultants. Stahl (1993) labels this 'capital-induced' migration.

Research on economic development and skilled migration in the newly industrialised countries (NICs) during the 1980s suggests three important lessons (Findlay *et al.* 1989). First, two-way skill mobility makes developing economies more attractive to international capital investment. Second, rapid economic growth makes a country more attractive as a destination for both non-nationals and returning nationals. Third, the transformation from a production base to an increasingly service oriented economy requires an ever greater mobility of skilled workers if a country is to compete successfully in the international trade in services.

Statistics for January 1988 show that there were only about 12,000 skilled immigrants in Peninsular Malaysia. About 21 per cent were Japanese, 13 percent British, 11 percent South Koreans and 9 per cent Americans. The others were from Asian countries (Pillai 1992). The composition of these international migrants reflects our main foreign investment source-countries. However, with the surge in foreign direct investment, this number increased five-fold to 61,269 by end August 1993 (Immigration Department Memo 1993). The number of skilled immigrants continued to increase rapidly in the first half of the 1990s with migrant workers playing an important role in alleviating shortages of higher-level manpower (Manning 2000).

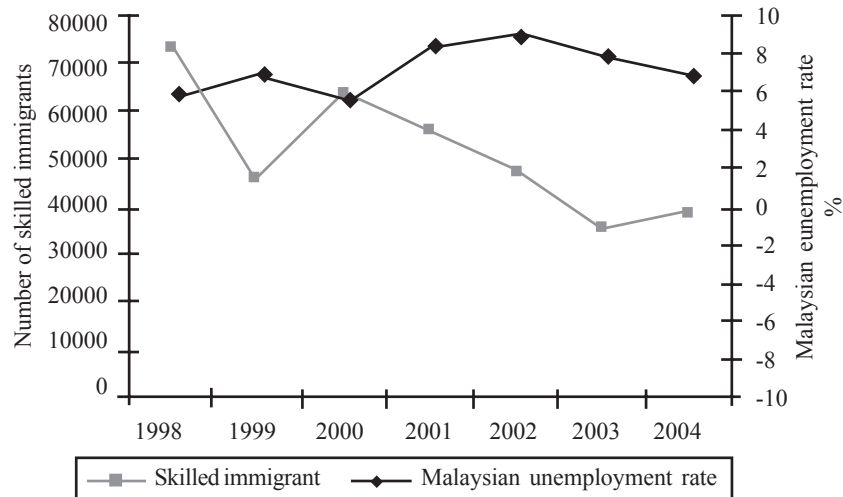
What lies behind this pattern? Some have argued that it is the result of well-planned, future oriented government policy consistent with the long-run prospects of the market (Wade 1990). Others opined that government policy, other than opening up the market, had little to do with the economic development. While the Asian financial crisis in 1997 had revealed the vulnerability of the newly emerging economies to external shocks, it did not significantly alter the stock of skilled immigrants in the region. However, there was considerable impact on the intensity of skilled immigration flow to Malaysia. Figure 1 presents time series data for the number of skilled immigrants alongside economic growth in Malaysia. After the 1997 recession, the number of skilled immigrants dropped by 50 per cent from 73,452 in 1998 to 38,682 in 2004. The drop in the number of immigrants could be attributed in part to economic recession and an increase in the supply of skilled and trained

Immigration Patterns of Skilled Workers in Malaysia



**Figure 1:** Skilled immigrants in Malaysia and Malaysian economic growth rate

Source: Computed from data gathered from Immigration Department of Malaysia, ASEAN Statistical Yearbook (2002) and World Bank (2001; 2003).



**Figure 2:** Skilled immigrants in Malaysia and Malaysian unemployment rate

Source: Computed from data gathered from Immigration Department of Malaysia, *Numerical Information Book* (Statistics Handbook), Malaysia (2001) and key statistics at the website [www.statistics.gov.my](http://www.statistics.gov.my)

manpower resulting from capacity expansion in education and training institutions in Malaysia. Nevertheless, it is worth noting that recovery was also rapid after the implementation of the National Recovery Plan (NEPR) in 1999, particularly in the manufacturing sector (Kassim 2000).

Figure 2 shows the number of skilled immigrants and the unemployment rate in Malaysia. The rate of unemployment is inversely correlated with the number of immigrants. Unemployment was also contained at a low rate due to the implementation of effective labour market measures. The unemployment rate has been at a low level of 3.1 per cent in 2000 and it is expected to decline to 2.7 per cent in 2005 (Malaysia 2001).

Another important element that must be considered is the immigration of skilled workers to less developed countries. Until recently, the flows between Asia Pacific countries and the developed countries such as the United States, United Kingdom and Japan have been very small. The movement of skilled workers has been predominantly among the Asia Pacific countries. Russell (1997) observed that international movements of people between the less developed and the more developed world represent only a small fraction of the world's population and that the larger share of international population movement is between developing countries.

### 3. Overall Immigration Patterns of Skilled Workers

We turn first to examine the patterns of overall migration flow of skilled workers to Malaysia from developed countries, developing countries and least developed countries. Table 1 shows interesting variations in the migration patterns of skilled workers from developed countries, developing countries and least developed countries for the period of 1998-2004. Data show that there was an appreciable decline in the proportion of skilled migrant workers from the developed countries. The proportionate share of skilled migrant workers from the developed countries declined to 30.9 per cent in 2004 from 41.1 per cent in 1999. On the other hand, the proportionate share of skilled workers from the developing countries, particularly Asia Pacific countries increased to 64.4 percent from 52.0 per cent during the same period. The proportionate share of skilled workers from the least developed countries declined further to 1.8 per cent in 2003 from 3.2 per cent in 1999.

Millington (1994) hypothesised that in recessions, net flows of migrants may be reversed as newly unemployed ex-migrants return home, while potential new migrants are deterred from leaving by the lack of economic opportunities in the receiving countries. However, the number rose slightly by 8.94 per cent to 38,682 in 2004 compared to a year before.

### 4. Sectoral Immigration Trends

The composition of skilled workers by sector is presented in Table 2. There are ten sectors in this analysis: construction, education, agriculture, manufacture, trade, transport, service, mining, petroleum and sports. Immigration flows of skilled workers from developed and developing countries to Malaysia are concentrated in the manufacturing and service sectors; but those from the least developed countries are much more likely to be found in the manufacturing sector.

Manufacturing and service sectors are the major attraction to skilled workers from all regions to Malaysia. The manufacturing sector has contributed significantly to the growth of the Malaysian economy as reflected by the gross domestic product (GDP), employment

Immigration Patterns of Skilled Workers in Malaysia

Table 1: Number of skilled immigrants from various regions to Malaysia, 1998-2004

	1998		1999		2000		2001		2002		2003		2004	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
<b>Developed countries</b>	30,083	40.96	18,800	41.12	23,867	37.37	20,504	36.53	16,519	34.99	12,205	34.37	11,969	30.94
<b>Developing countries</b>														
1. Asia Pacific	39,304	53.51	23,780	52.01	36,456	57.07	32,392	57.72	27,878	59.05	21,187	59.67	24,915	64.41
2. Middle East and North Africa	1,298	1.77	975	2.13	1,086	1.70	973	1.73	857	1.81	748	2.11	790	2.04
3. Latin America and Caribbean	192	0.26	150	0.33	193	0.30	174	0.31	146	0.31	115	0.32	147	0.38
4. Europe and Central Asia	74	0.10	48	0.11	48	0.08	43	0.08	75	0.16	28	0.08	35	0.09
5. Sub-Saharan Africa and South Africa	290	0.39	49	0.11	254	0.40	219	0.39	187	0.40	116	0.33	108	0.28
<b>Least developed countries</b>	2,463	3.36	1,886	4.13	1,947	3.05	1,800	3.021	1,534	3.25	1,102	3.10	710	1.84
Stateless	38	0.05	30	0.07	24	0.03	19	0.03	12	0.03	7	0.02	8	0.02
<b>TOTAL</b>	<b>73,452</b>	<b>100.0</b>	<b>45,718</b>	<b>100.0</b>	<b>63,875</b>	<b>100.0</b>	<b>56,124</b>	<b>100.0</b>	<b>47,208</b>	<b>100.0</b>	<b>35,508</b>	<b>100.0</b>	<b>38,682</b>	<b>100.0</b>

Source: Computed from data gathered from the Immigration Department of Malaysia.

**Table 2:** Skilled immigrants from developed, developing and least developed countries by sector, 1998 and 2004

	Developed countries		Developing countries		Least developed countries	
	1998	2004	1998	2004	1998	2004
Construction	2534	481	4204	869	270	14
Education	614	462	797	754	109	129
Agriculture	14	15	112	67	2	0
Manufacture	11262	4724	16268	12982	909	652
Trade	1160	392	1624	664	304	83
Transport	251	122	249	193	16	9
Service	12712	4903	16587	9920	803	321
Mining	13	119	26	18	2	1
Petroleum	1307	667	1127	439	38	79
Sports	216	84	164	127	10	12
Total	30083	11969	41158	26033	2463	1300

*Source:* Computed from data gathered from the Immigration Department of Malaysia.

and exports. Between 1995 and 2000, the manufacturing sector grew at an average annual rate of 4.8 per cent, but was expected to decelerate to 4.6 per cent during the period 2001-2005 (Malaysia 2001). In 2000, the manufacturing sector contributed 27.6 per cent to total employment in Malaysia. At the same time, the sector has gradually changed from one that is labour-intensive to one that is capital-intensive in the past two decades. This has led to a greater demand for skilled workers by industries. In 1999 the sharper-than-expected downturn in the US economy had adversely affected Malaysia's all-important electronics export, and hence the Malaysian economy (Table 2).

Over time, the services sector has become increasingly important as the economy matures. Wages tend to rise in the industrial sector as the level of technology use expands with increased production and as the fruits of this higher productivity are shared by workers and owners of enterprises. Production methods become relatively intensive in the use of knowledge – human capital – and of physical capital (Cypher 2004). Although growth in the finance, insurance, real estate and business services sub-sector was adversely affected by the financial crisis, it recovered to the highest average employment growth of 6.4 per cent per annum in 2000 due to the effective recovery measures undertaken. The pegging of the Ringgit to the US dollar, introduced in September 1998, had insulated Malaysia against currency speculation.

The education sector expanded rapidly to meet the increasing and changing demand of industries for skilled manpower. With the implementation of the Private Higher Educational Institutions Act 1996, the private sector increased its involvement in the provision of tertiary education. Six private universities, namely Multimedia University, Universiti Tenaga Nasional, Universiti Teknologi Petronas, Universiti Tun Abdul Razak, International Medical University and Universiti Industri Selangor had been set up. Some colleges have been upgraded to the university level such as Lim Kok Wing College University and Sedaya College University. The Act also allowed foreign universities to establish branch campus. Three institutions, namely Monash University, Australia, Curtin University of Technology,

**Table 3:** Employment by sector, 1995-2005 ('000 persons)

Sector	1995		2000		2005		Average annual growth rate (%)	
		%		%		%	7MP	8MP
Agriculture, Forestry, Livestock & Fishing	1,492.7	18.7	1,407.5	15.2	1,306.5	12.0	-1.2	-1.5
Mining & Quarrying	40.5	0.5	41.2	0.4	42.3	0.4	0.3	0.5
Manufacturing	2,027.5	25.3	2,558.3	27.6	3,200.3	29.5	4.8	4.6
Construction	717.1	9.0	755.0	8.1	880.1	8.1	1.0	3.1
Electricity, Gas & Water	67.4	0.8	75.0	0.8	85.6	0.8	2.2	2.7
Transport, Storage & Communications	395.2	4.9	461.6	5.0	552.7	5.1	3.2	3.7
Wholesale & Retail Trade, Hotels & Restaurants	1,323.5	16.5	1,584.2	17.1	1,880.9	17.3	3.7	3.5
Finance, Insurance, Real Estate & Business Services	372.8	4.7	508.7	5.5	647.3	6.0	6.4	4.9
Government Services	885.8	11.1	981.0	10.6	1,070.3	9.8	2.1	1.8
Other Services	676.7	8.5	898.7	9.7	1,192.9	11.0	5.8	5.8
Total	7,999.2	100.0	9,271.2	100.0	10,858.9	100.0	3.0	3.2
Labour Force	8,254.0		9,572.5		11,161.9		3.0	3.1
Local	7,401.3		8,823.3		10,591.9		3.6	3.7
Foreign	852.7		749.2		570.0		-2.6	-5.3
Unemployment	254.8		301.3		303.0			
Unemployment Rate (%)	3.1		3.1		2.7			

Source: Eighth Malaysia Plan 2001-2005.

Australia and Nottingham University, United Kingdom, established branch campuses that offered full degree courses. To alleviate the shortage of lecturers, the government relaxed the rules on the recruitment of foreign lecturers. This explains why when the economy was experiencing a difficult time and there was a sharp drop in the immigration of skilled workers between 1998 and 2004, the recruitment of skilled workers in the education sector was hardly affected, as shown in Table 2.

Out of the ten sectors, the mining sector is likely to recruit skilled migrant workers from the developed countries. Malaysia Mining Corporation is diversifying away from tin and is prospecting for base and precious metals on the east coast of Peninsular Malaysia, such as copper, silver, gold and bismuth in Pahang and deposits of alluvial gold in Kelantan (Malaysia Business Intelligence Report 2001). The energy markets had also been hit by the recession, resulting in a sharp decline in global oil demand of around 500,000 barrels per day (IEA 1998). The nation uses a mix of coal, gas and hydropower in generating electricity to meet the demand. In 1997, Malaysia's oil production was 75,000 barrels per day.

## 5. Link between the State of Development and Sectoral Patterns

After the 1997 financial crisis, Malaysia's leaders began looking at ways of insuring against another crisis and achieving the goal of making Malaysia a developed nation by 2020 back on track. They started a new campaign to court foreign investment and management expertise and promote information technology. In October 2000, a decision was made to allow minority stakes of 30 per cent in the national car company and 40 per cent in the national airline by foreign investment and management. Already in 2001, the ports in Malaysia had been opened to a 30 per cent foreign-investment stake. Foreign involvement in IT, energy and financial services was also solicited.

As a late comer to industrialisation, Malaysia has largely developed, not by the invention of new products, but by experiencing changes in the production structures by the importation of technology (Amsden 1989). The nation imported foreign technical experts to fill labour requirements in higher skilled jobs (Lim 1988).

The emphasis on industrial development has resulted in sectoral and regional imbalances, rural-urban migration, rapid urbanisation, and labour shortages in both the industrial and agricultural sectors. Table 3 shows the distribution of employment by sector and the estimated demand for foreign labour in Malaysia in 1995, 2000 and 2005. It can be observed from the table that for the past decade at least, the manufacturing sector has emerged as a major employer in Malaysia, followed by wholesale and retail, agriculture and services. Thus, labour shortages and the bulk of foreign workers are also distributed in these main sectors. With the imposition of a freeze on the immigration of foreign workers in 2004, except for domestic helpers and extension of work permits in export oriented manufacturing and plantation sector to a maximum of five years, the number and proportion of foreign workers in these sectors should remain stable unless there is a clear indication of redeployment and retrenchment (Murali 2004). The implementation of *Malaysia My Second Home* (MM2H) since 1992 and the *Spouse Programme* in 1996 for the expatriates is aimed at attracting skilled foreign workers to Malaysia.

The ratio of foreign to local workers has often been cited by different sources to be too high (Hamid 2006). Migrant levels that reach 5 per cent of the total population are considered unhealthy for the country (*The Star* 2004). According to the 2000 Population Census of



Malaysia, migrant levels had increased to 1,384,774 and raised their percentage in total population to 5.7 per cent (Lin 2006). The ratio of foreign workers to labour force worsened from 1:10 in 1995 to 1:8 in 1997 but improved to 1:13 in 2000. Variations in this ratio according to sectors can be observed in Table 3.

## 6. Conclusion

This analysis shows that immigration patterns of skilled workers closely reflect economic development in Malaysia. These patterns suggest that rising income levels cause sectoral composition to change from agriculture-based to manufacturing and service. The transformation of production methods and processes towards capital-intensive and information communications technology (ICT) applications led to shortages of highly skilled manpower in specific fields. The mining and petroleum sectors are in an exploration stage due to less dependence on the Middle East oil supply and skilled workers are also required in these sectors. Reserves have been discovered in Turkmenistan and Myanmar. Vietnam, Algeria and Angola are still under exploration stage for potential reserves (Malaysia Business Intelligence Report 2001). The continuous economic growth in Asia Pacific causes immigration patterns of skilled workers to flow towards developing countries.

Malaysia enjoys a significant advantage in foreign investment on account of political stability, bureaucratic efficiency and infrastructural support activities. However, it faced serious labour shortage and a technological impasse when foreign capital inflows surmounted its labour reserves and the prevailing human resource support mechanisms failed to transform adequately to facilitate a rise to higher value-added operations. Despite these shortcomings, Malaysia still enjoys a massive lead here in attracting skilled workers due to its better infrastructure, political stability and long experience in production.

## References

- Amsden, A. H. 1989. *Asia's Next Giant: South Korea and Late Industrialisation*. London: Oxford University Press.
- Chenery, H. and M. Syrquin. 1975. *Patterns of Development 1950-70*. New York: Oxford University Press.
- Cypher, James M. and L. Dietz James. 2004. *The Process of Economic Development*. 2nd ed. London and New York: Routledge Taylor and Francis Group.
- Findlay, A. and L. Garrick. 1989. Skilled Scots. Applied Population Research Unit Discussion Papers, No.89. University of Glasgow.
- Hamid, H. 2006. Foreign labour dilemma. *Business Times*, 25 September 2006.
- IEA. 1998. *Oil Market Report July 1998*. Paris: International Energy Agency (IEA).
- Kassim, A. 2000. Recent trends in migration movements and policies in Malaysia. In *International Migration in Asia. Trends and Policies*, pp. 261-283. Paris: OECD.
- Lim, L.L.1988. Labour markets, labour flows and structural change in Peninsular Malaysia. In *Labour Market Developments and Structural Change: The Experience of ASEAN and Australia*, ed. E.E. Pang, pp. 100-138. Singapore: Singapore University Press.
- Lin, M. 2006. Indonesian Labor Migrants in Malaysia: A Study from China. ICS Working Paper No. 2006-11, Institute of China Studies, University of Malaya, Malaysia pp.1, August 2006.
- Malaysia. 1993. Immigration Department Memorandum, 15 October 1993, in answer to question in Parliament by YB. Hj. Mohd. Sharif Jajang.
- Malaysia. 2001. *Eighth Malaysia Plan 2001-2005*. Kuala Lumpur: National Printing Department.

Tan Chuie Hong, A. Solucis Santhapparaj and Ho Sin Ban

- Malaysia Business Intelligence Report. 2001. Walden Publishing Ltd., Cambridge, England: World of Information, pp. 26, July 2001.
- Manning, C. 2000. *Trade Facilitation in the Asia Pacific: New Directions and the Development Challenge*. APEC Workshop, Singapore, 13-14 September.
- Millington, J. 1994. Migration, wages, unemployment and the housing market. *International Journal of Manpower* **15(9)**.
- Murali, R. 2004. Shorter work permits. *News Straits Times*, 28 October.
- Pillai, Patrick. 1992. People on the Move: an Overview of Recent Immigration and Emigration in Malaysia. Research Paper, Institute of Strategic and International Studies, Malaysia.
- Russell, S.S. 1997. International Migration: Implications for the World Bank. Working Paper, Human Capital Development and Operations Policy. Washington DC, World Bank.
- Stahl, C.W. 1993. Explaining international migration. In *Global Population Movements and their Implications for Australia*, ed. C.W. Stahl, R. Ball, C. Inglis and P. Gutman. Australia Government Publishing Service, Canberra.
- The Star Online*. 2004. Too many immigrants harmful for the country, 13 December.
- Wade, R. 1990. *Governing Theory and the Role of Government in East Asian Industrialization*. Princeton: Princeton University Press.
- World Bank. 1993. *World Development Report 1993*. London: Oxford University Press.
- World Bank. 2001. *World Development Indicators 2001*. Washington, DC: World Bank.
- World Bank. 2003. *World Development Report 2003*. London: Oxford University Press.