Society at a Glance Asia/Pacific 2011

OECD

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Foreword

This is the second edition of Society at a Glance: Asia/Pacific, *the biennial OECD overview of social indicators. This report addresses the growing demand for quantitative evidence on the state of and trends in social well-being. It updates some indicators included in the first edition and adds some new ones. Additionally, this edition makes a considerable effort to return to the roots of the publication with its "At a Glance" overview. It reduces the number of indicators to 25. There is a strong focus on simple language and a shorter text. Charts and boxes are direct and simple and reflect a higher degree of standardisation. We believe that such an approach is essential in this increasingly information-rich age.*

The 2011 report includes 36 countries and economies for which comparable data are available, compared to the 25 covered in the 2009 edition.

This report includes a special focus on unpaid work (Chapter 1). It also provides a guide to help readers in understanding the structure of social indicators (Chapter 2), and a summary – Society at a Glance, *at a glance (Chapter 3). More detailed information on all indicators, including those not in this edition, can be found on the OECD web pages (www.oecd.org/els/social/indicators).*

This report was prepared by Simon Chapple. As this report addresses a wide range of topics, it would have been impossible to complete without the contributions of many people inside and outside the OECD Social Policy Division. These include Alexandra Bytchkova, Michael De Looper, Angelica Del Pero, Pauline Fron, Maxime Ladaique, Luca Lorenzoni, Marlène Mohier, Andrew Reilly and Kim Robin. Monika Queisser, Head of the OECD Social Policy Division, supervised the report.

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Acronyms and Conventional Signs

Asia/Pacific countries and economies ISO codes

Armenia	ARM
Azerbaijan	AZE
Bangladesh	BGD
Bhutan	BTN
Brunei Darussalam	BRN
Cambodia	KHM
China	CHN
Fiji	FJI
Hong Kong (China)	HKG
India	IND
Indonesia	IDN
Kazakhstan	KAZ
Korea, Democratic People's Republic of	PRK
Kyrgyzstan	KGZ
Lao People's Democratic Republic	LAO
Macao (China)	MAC
Malaysia	MYS
Maldives	MDV
Mongolia	MNG
Myanmar	MMR
Nepal	NPL
Pakistan	PAK
Papua New Guinea	PNG
Philippines	PHL
Samoa	WSM
Singapore	SGP
Sri Lanka	LKA
Tajikistan	TJK
Thailand	THA
Timor-Leste	TLS
Tonga	TON
Viet Nam	VNM

OECD Asia/Pacific countries ISO codes

Australia	AUS
Japan	JPN
Korea, Republic of	KOR
New Zealand	NZL

Asia/Pacific refers to all countries including OECD members Australia, Japan, the Republic of Korea and New Zealand.

Conventional signs

.. *Not available.*

(↘) in the legend relates to the variable for which countries are ranked from left to right in decreasing order.

(↗) in the legend relates to the variable for which countries are ranked from left to right in increasing order.

OECD/Korea Policy Centre

The Joint OECD/Korea Policy Centre (*www.oecdkorea.org*) is an international co-operation organisation established by a Memorandum of Understanding between the OECD and the Government of the Republic of Korea. The Centre – officially opened on 7 July 2008 – results from the integration of four pre-existing OECD/Korea Centres, one of which was the Regional Centre on Health and Social Policy (RCHSP), established in 2005.

The major functions of the Centre are to research international standards and policies on international taxation, competition, public governance and social policy sectors in OECD member economies and to disseminate research outcomes to public officials and experts in the Asian region. In the area of health and social policy, the Centre promotes policy dialogue and information-sharing between OECD economies and non-OECD Asian/Pacific countries and economies.

There are three main areas of work: social protection statistics (jointly with the International Labour Organisation and the Asian Development Bank); health expenditure and financing statistics (jointly with the Asian Pacific National Health Account Network and the World Health Organisation) and pension policies (jointly with the World Bank). In pursuit of this vision, the Centre hosts various kinds of educational programmes, international meetings, seminars and workshops in each sector and provides policy forums presented by experts at home and abroad.

Chapter 1

How do People in the Asia/Pacific Region Spend their Time?

Why time use is an important social indicator

This special chapter considers time-use patterns across Asia/Pacific countries and economies and compares these to OECD patterns. It focuses particularly on unpaid work and free-time. Unpaid work within the home includes cooking, cleaning, shopping and raising children. Unpaid work contributes significantly to the well-being of families and others. Focussing solely on market income measures, rather than also considering unpaid work, may lead to incorrect inferences about levels and changes in well-being. Since women typically do much of the unpaid work, considering unpaid work acknowledges the importance of a major female contribution to well-being. In addition to unpaid work within the household, people carry out vital unremunerated work for relatives who live outside the household and for the wider community. Voluntary work, such as helping out neighbours, caring for older people and people with disabilities, aiding charities, assisting new immigrants, training sports teams and administering schools, also contributes to societal well-being but is not included in traditional economic measures. Traditional income-based measures of well-being also neglect the measurement of the amount of free time and leisure time that people have available to them. Leisure time is self-evidently an important component of people's well-being.

The challenge of time-use comparisons across Asia/Pacific countries and economies

Time-use statistics are quantitative summaries of how people allocate their time over a specified period – usually 24 hours. Time-use statistics include information on the type of activities people engage in and the duration of each of these activities. The respondent's description of his or her activities are coded and systematically aggregated into a set of broad categories such as "time spent in work", "time spent on household chores", "time spent in leisure activities" or "time spent on personal care". Ideally, they sample the population over a year in a manner that takes into consideration weekends and holidays, as well as seasonal effects.

Much as elsewhere in the world, up-to-date, reliable and comparable data on time use are very limited for countries of the Asia/Pacific region. Time-use data were obtained for 12 out of 36 countries included in the *Society at a Glance: Asia/Pacific* edition. Table 1.1 lists the countries for which surveys were available, the dates of the survey, the number of respondents, the data source and information on other data features.

Although data were obtained for only a minority of countries, the size of the total regional population covered is substantial. Three of the four most populous countries in the region – India, China and Pakistan – are covered. Additionally, the countries for which time-use information is available cover a broad spectrum. The subset covered includes countries at very different levels of economic development, with industrial developed economies, the large emerging economies of China and India, former Soviet transition economies, and some of the world's poorest countries with substantial peasant sectors, such as Cambodia and Pakistan. The geographic coverage is also good.

Table 1.1. **Available time-use surveys**

	Years of the survey	Sample size	Type of survey	Age range (years)	Source	Other data features
Armenia	2008	Unknown	Unknown	15-80	UNECE Statistical Division Database, Gender Statistics Database	Not representative of the year or of the population
Armenia	2004	235 people, 60 households	Two diaries, One for weekdays and one for weekends	15-80	National Statistical Service of the Republic of Armenia Armenia TU Pilot Survey 2004	Not representative of the year or of the population
Australia	2006	6 961 people, 3 643 households	Two consecutive days, diary	> 15	Australian Bureau of Statistics, Time Use Survey	
Cambodia	November 2003 to January 2005	2 000 households	Diary sheet included in the household survey	> 5	National Institute of Statistics of Cambodia *www.nis.gov.kh/index.php/statistics/surveys/cses*	
China	2008	37 142 people, 16 661 households	One weekday + one week-end day	15-74	National Bureau of Statistics of China, Time Use Survey	Not representative of the year
India	July 1998-June 1999	18 591 households	One week – interviewing method	> 6	Ministry of Statistics and Programme Implementation. Government of India	
Japan	2007	18 291 individuals, 3 866 households	Unknown	> 10	Statistics Bureau and Statistical Research Training Institute, Survey on Time Use and Leisure Activities (Questionnaire B)	Not representative of the year
Kazakhstan	2006	Unknown	Unknown	20-74	UNECE Statistical Division Database Gender Statistics Database	
Korea, Rep.	2004	12 750 households	Two consecutive days, diary	> 10	Korea National Statistical Office, Time Use Survey	Not representative of the year
Kyrgyzstan	2005	Unknown	Unknown	20-74	UNECE Statistical Division Database Gender Statistics Database	
Mongolia	2000	2 753 people, 1 086 households	24-hour diary	> 12	NSO, UNDP, A Pilot Time Use survey, 2000.	Not representative of the year
New Zealand	July 1998-June 1999	8 532 people	Two consecutive days, diary	> 12	Statistics New Zealand, Time Use Survey	
Pakistan	2007	19 380 households	24-hour diary	> 10	Government of Pakistan, Statistics Division, Federal Bureau of Statistics, Time Use Survey 2007, April 2009	Representative for the population and the year

However, several strong caveats regarding the inter-country comparability of the time-use data used here need to be kept in mind. One relates to the data collection method. Data on time use can be collected in two ways: surveys and diaries. Surveys ask respondents how much time they spent on activity *j* in a defined reference period, such as the previous 24 hours. However, this method can miss activities that take short amounts of time, and can lead to misreporting if activities do not have a fixed schedule over time (Ilahi, 2000). Diaries, on the other hand, are filled by the respondent him/herself or with the help of fieldworkers. Usually based on a 24-hours recall, this method emphasises the chronology of events. Because it is more detailed, it is also more costly in money and in the respondent's time. Contrary to the survey method, it captures non-routine activities well. However, there is a risk that respondents confuse multiple or simultaneous activities. For instance, childcare often tends to be over-reported, because it is the most common multiple activity (Ilahi, 2000).

Differences in survey coverage also complicate the cross-country comparison. Given that time allocation is not constant over the year, the season of data collection may introduce a bias in the comparability of time-use data, especially in agricultural economies (Ilahi, 2000). For example, in China, Japan, the Republic of Korea, New Zealand, Armenia and Mongolia, the survey took place within a period of one month or less, so the sample

may not be representative for the year. Moreover, while some surveys were conducted in spring (China, Mongolia, New Zealand), others were conducted in autumn (the Republic of Korea, Japan, Armenia). In Pakistan, seasonal variations in the time-use pattern were captured by conducting the survey through the four quarters of the year. In Cambodia and Australia, the period covered by the survey is equal or longer than a year, also avoiding the issue of seasonality.

Another type of bias concerns the days covered by the survey. In Australia, the Republic of Korea and New Zealand, diaries are filled for two consecutive days. However, this method does not distinguish between weekdays and week-end days. For Pakistan, respondents were asked about their activities only for 24 hours. However, the percentage distribution of diary days of the week shows that all days of the week are approximately equally represented except Sundays – reflecting the fact that Sunday is generally not regarded as a work day in Pakistan. Surveys that examine only the allocation of time during workdays are not entirely comparable with those that cover non-work days as well. The former tend to underestimate women's work contribution, since unpaid/non-market work that is usually accomplished by women often takes place during weekends (United Nations, 1995).

In the Chinese time-use survey, respondents filled the diary for one weekday and one week-end day. For the Mongolian survey, the seven days of a week were divided into five (Sunday, Monday, Tuesday/Wednesday, Thursday/Friday, Saturday). The same number of households was selected to answer for each group of days. In other words, two-thirds of the respondents were assigned to make two-day diaries and one-third of the respondents were assigned to make three-day diaries. In the Australian survey, to deal with the issue of holidays, four 13-day periods in 2006 containing a representative proportion of public and school holidays were defined.

Geographic coverage is an important issue too. If the survey coverage is not national, the surveyed area may not be representative of the country as a whole. More generally speaking, averages may hide intra-country differences, such as urban and rural differences, which are usually wider in developing countries. In Pakistan, some areas located in difficult terrain could not be included in the survey due to constraints of time, access and cost. Nevertheless, the population excluded represents only 3% of the total population.

Another related consideration concerns the population group actually covered. Indeed, average time spent on paid work or leisure will certainly vary according to the age of the population surveyed. For instance, the data for Kazakhstan and Kyrgyzstan covers the population aged 20 to 74. On the other hand, Cambodian data concerns the population aged 5 and over. In the former case, excluding those older than 75 means that paid work will tend to be higher than if they were included. In Cambodia's case, the average time spent on paid work is expected to be lower than if only the adult population were covered, whereas in the former two countries the opposite holds.

Surveys also differ in whether they record simultaneous activities and if so, how. Generally, the data are coded to show people engaged in one activity at a time. For some countries, however, surveys include separate questions designed to learn about simultaneous activities (*i.e.* watching television while cooking or supervising children while ironing clothes), which allows a distinction between "primary" and "secondary" activities. So one limitation of the general approach is that "primary" activities are meticulously tracked while "secondary" ones are usually overlooked. The comparability of estimates for secondary activities is also affected by whether activities that typically require only a few minutes of

one's time, *i.e.* moving a load of laundry from the washer to the dryer, are reported consistently enough to produce comparable estimates of the time devoted to them. This in turn depends on the length of the time slots in which respondents can report their activities, which range from five minutes in Australia and New Zealand to 15 minutes in Japan.

We were unable to adjust for differences in data collection methods, nor for differences in survey coverage or respondent age. These strong comparability limitations should be kept in mind when considering the results. Given that the categories of activities are not equally detailed in all the data sources used here, the activities were aggregated into five very broad categories for the purpose of harmonisation: 1) Market work and learning activities, 2) Non-market work, 3) Leisure, 4) Personal care, and 5) Other. Harmonisation was eased for several countries (Mongolia, Pakistan and India) for which the survey used the UN Trial International Classification of Activities for Time-Use Statistics (United Nations, 2009).[1]

In the "market work and learning activities" category, all jobs and work that encompass the creation of market value are included. Learning activities are also included, covering time spent at school, homework, personal studies and professional training. Following the ICATUS terminology, this first category covers employment for establishments, primary production activities (not for establishments), services for income and other production of goods (not for establishments) and all learning activities. "Non-market work" covers routine household chores and management (*e.g.* cooking, laundry, pet care, shopping and gardening), care for others (for household and non-household members) and volunteering activities. "Leisure" includes hobbies, sporting activities, participation in social or cultural events, use of mass media and socialising activities. "Personal care" includes sleep, eating and drinking as well as other household medical and personal services (hygiene, grooming, visiting doctors, etc.). "Other" contains religious activities, civic obligations and unspecified activities and travel when the travel could not be included in the other categories.[2] For some countries, more detailed information on the type of leisure and personal care (including sleeping time) is available, so more detailed types of activities can be considered.

Country-specific issues from the surveys

Although category harmonisation at the global level is desirable, when conducting a survey on time allocation there are cultural features peculiar to each society that deserve mention. Time may not have the same meaning in societies where large numbers of people are peasants, illiteracy is considerable, and society does not march according to the dictates of synchronised clocks, as it does in rich industrialised societies where people's regular rhythms are co-ordinated like clockwork. What is more, the way time-use surveys are designed, or the way categories are organised and constructed from filled diaries, in itself gives some interesting insights into cultural differences across the region's countries.

Country-specific activities are illustrated by time-use survey categories. For instance, in the Indian 1998-99 time-use survey, a category was created for making cow dung cakes, which was recorded as a sub-category of animal husbandry in the primary production section. Another India-specific activity was created for "talking, gossiping and quarreling", surprisingly categorised under "Personal care and Self-Maintenance". Indeed, Indians do spend a consequential amount of time on this, especially in rural areas. Men are found to dedicate even more time than women to this activity, with on average almost eight hours

per week, compared to seven hours for women (United Nations, 2000). To maintain consistency in the cross-country comparison, talking, gossiping and quarreling were categorised here under "socialising", a leisure category.

The distinction between what constitutes leisure and what constitutes unpaid work is not always clear-cut between countries. The Japanese Statistics Bureau makes a distinction between what is done as part of housework and what is done as leisure for several activities, for example, "making sweets", *versus* making sweets as a hobby. Additionally, in Japan, contrary to other countries, "pet care" and "walking the dog" were considered as leisure. To maintain consistency with all other countries, all these "productive hobbies" were categorised under "non-market work".

For Armenia, Kazakhstan and Kyrgyzstan, "volunteering" was categorised as "leisure". Since detailed data on time spent on volunteering activities was not available for Kazakhstan, we could not extract the time spent on "volunteering" from the broader "leisure" category, so that leisure time for Kazakhstan still includes time dedicated to volunteering.

The meaning of caring activities may vary according to the country. Contrary to most of the surveys, in the Korean, Chinese and Japanese time-use surveys, there is no division between care for household members and care for non-household members. Instead, they have one category for "family care" and another for "care for others". It is interesting to note that these three countries are marked by the Confucian culture and philosophy, which encourages filial piety and is even given institutional legitimacy.

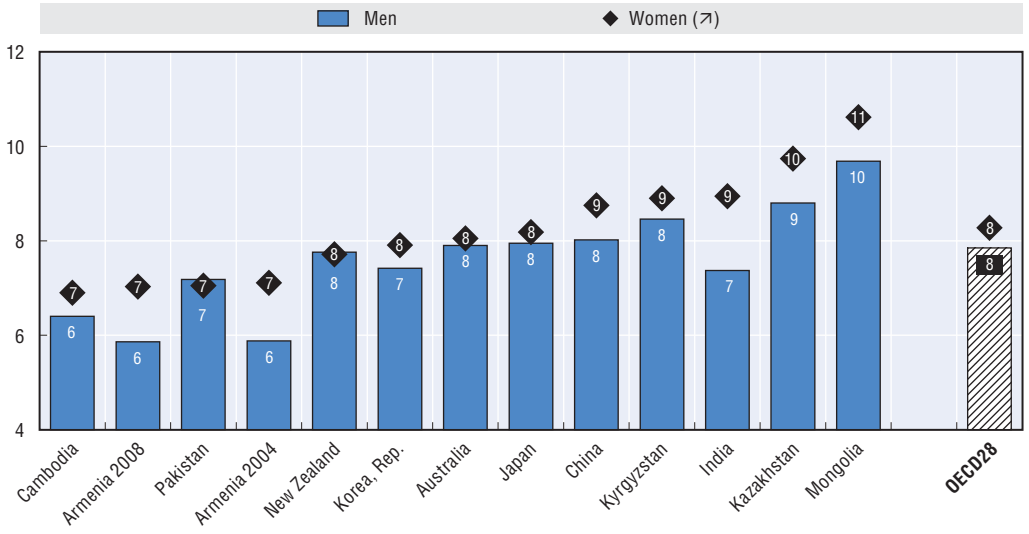
Working time

In all countries, both males and females work more than 350 minutes per average day, *i.e.* approximately six hours, or one-quarter of the day. This amount of time represent one-third of people's waking time (Figure 1.1). However, differences exist between countries in the time spent on work. People work the longest in Mongolia, where men and women work on average respectively 581 minutes (almost 10 hours) and 637 minutes (almost 11 hours) per day. In Cambodia, where people work the shortest time, males and females work on average four hours less than in Mongolia (384 minutes, or 6.4 hours, for males; and 414 minutes per day, 6.9 hours, for females). The low amounts of work in Cambodia almost certainly reflect the fact that the base population is five years and older, meaning that considerable numbers of children are included. The four rich OECD countries stand in the middle of the ranking. People in the region tend to work more in total than the OECD average. Generally women tend to do more total work than men, except in Pakistan and New Zealand, where men do marginally more work.

Now consideration turns to the two major sub-categories of total work – market work and learning, and unpaid work, respectively. If only time allocated to market activities and learning is considered, Figure 1.2 shows that Mongolia is the most marketised society, followed by China, the Republic of Korea and Cambodia. At the lower end are Armenia, Australia, New Zealand and Kazakhstan. In all the region's countries, men always do more market work and learning than women. This gender gap in market work is proportionately greatest in Pakistan and smallest in Mongolia. Figure 1.3 presents the time-use information with regard to unpaid work. Unpaid work is especially high in Kazakhstan, being the highest in the region for both women and men. Unpaid work is very low in Cambodia and, to a lesser extent, the Republic of Korea. Pakistani men also do very small amounts of unpaid work. Overall, women always do more unpaid work than men, but the

Figure 1.1. **Total working time is the longest in Mongolia**

Total hours worked in an average day, by country and gender



Source: See Table 1.1 on available Time Use Surveys.

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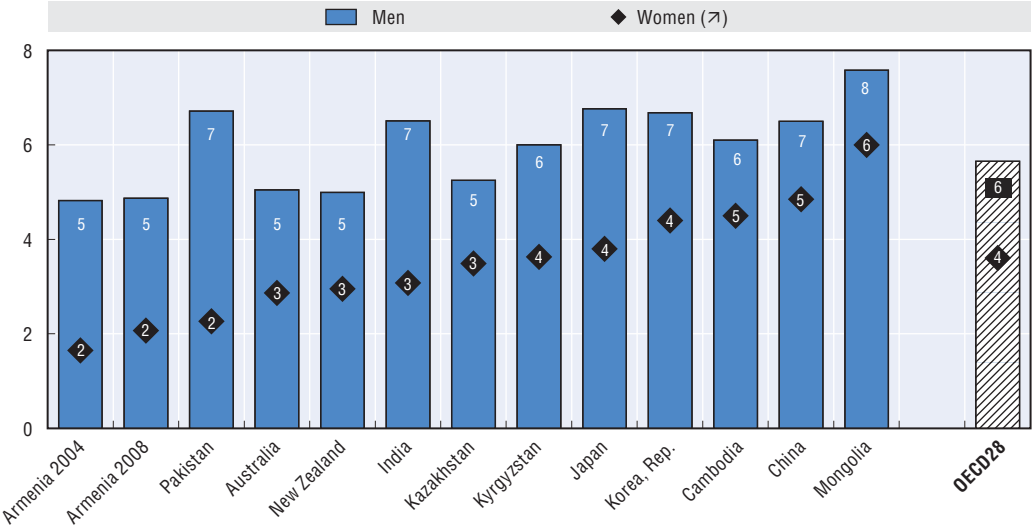
gender gap varies greatly, being relatively high in Pakistan and low in New Zealand. The overall picture from Figures 1.2 and 1.3 is that Pakistan is very gender specialised in terms of the composition of work and New Zealand is relatively unspecialised.

Contrary to expectation, women spend similar amounts of time on unpaid activities in OECD countries and in non-OECD developing countries. In industrialised countries, the diffusion of household appliances, such as washing machines and freezers, and good access to basic services, such as electricity and water, should reduce the time spent on

Figure 1.2. **Mongolians spend the longest time in market work and learning**

Time spent on market and learning activities in hours per average day, by country and gender



Source: See Table 1.1 on available Time-use Surveys.

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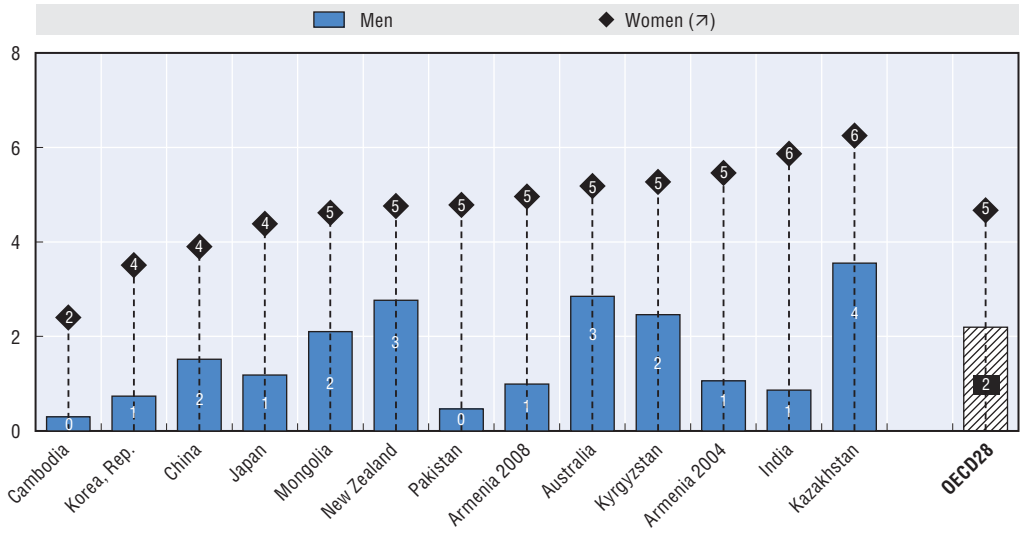
Figure 1.3. **Kazakhs spend the most time on non-market activities**

Time spent on non-market/unpaid work in hours per average day, by country and gender



Source: See Table 1.1 on available Time-use Surveys.

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household work considerably. For instance, in developing countries such as Pakistan and Cambodia, women spend a large amount of time collecting water and wood (Ilahi, 2000) – activity that does not exist in developed countries. However, the data shows that time spent by women on unpaid work does not vary much across our sample countries. The average time spent on unpaid work by women in Asian OECD countries was 268 minutes per day (4.5 hours), compared to the OECD average of 220 minutes per day (3.6 hours). Nevertheless, although time spent on unpaid work does not vary much between OECD and non-OECD countries, the physical intensity of work is unlikely to be the same, as in developing countries it may involve carrying water, collecting and carrying firewood, or processing foodstuffs by hand. Although it is not directly captured by time-use surveys, the intensity of effort is an important element to be kept in mind.

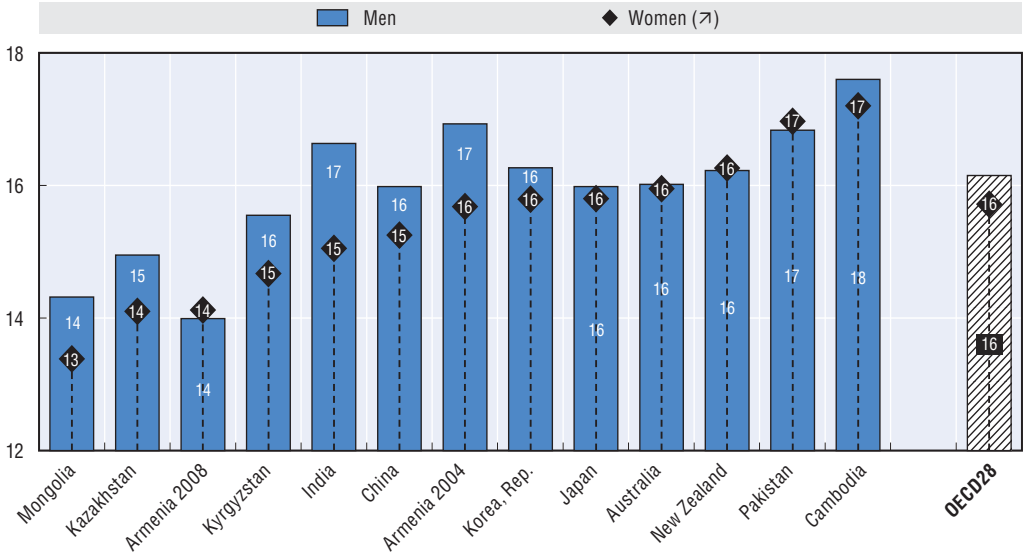
Free time

Free time is all time not spent working. Free time can in turn be divided into personal care and leisure. The way time is allocated between all the possible activities people can do in their free time depends on their preferences and on various socio-economic incentives. Sleeping time is essential for individual's well-being. It can also be assumed that sleep adds to an individual's productivity and is necessary for efficiency and is required even if the goal is to maximise income. As underlined by Biddle and Hamermesh (1990), many labour economics models consider sleep as a fixed biological constant. However, theory and evidence tend to show that sleep time, like any other activity, responds to economic incentives. If this is the case, sleep becomes a leisure-like activity and depends on individual preferences. Several recent studies thus understand sleep as leisure and categorise all sleep-related activities as leisure (OECD, 2009, p. 22). As already mentioned, both leisure and sleeping time matter for an individual's physical and mental health and well-being. As a consequence, looking at leisure time and sleep as social indicators should be considered as a fruitful initiative.

People in Cambodia (note the caveat of age – the sample is of those 5 years and older) and Pakistan have the largest amounts of free time (Figure 1.4). Cambodians have more than 16 hours of free time per day (1 000 minutes), whereas in Mongolia, which is the country where people work the longest, people have only 13 hours (800 minutes) of free time. Generally speaking, men have slightly more free time than women (Figure 1.5), reflecting longer total working time for women (Figure 1.1).

Figure 1.4. **Cambodians have the most free time**

Total free time by gender in hours per average day



Source: See Table 1.1 on available Time-use Surveys.

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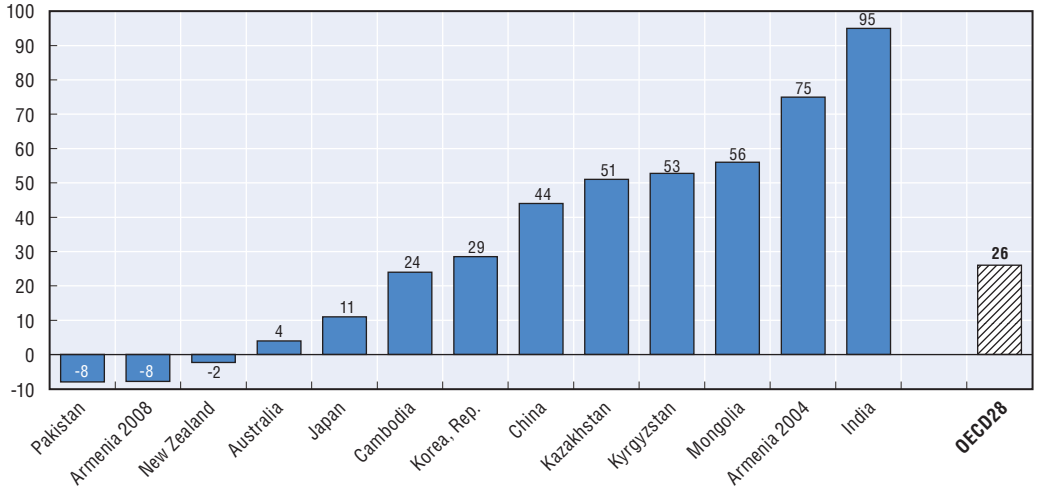
Figure 1.5. **Men usually have more free time than women**

Gender gap in total free time in minutes per average day



Source: See Table 1.1 on available Time-use Surveys.

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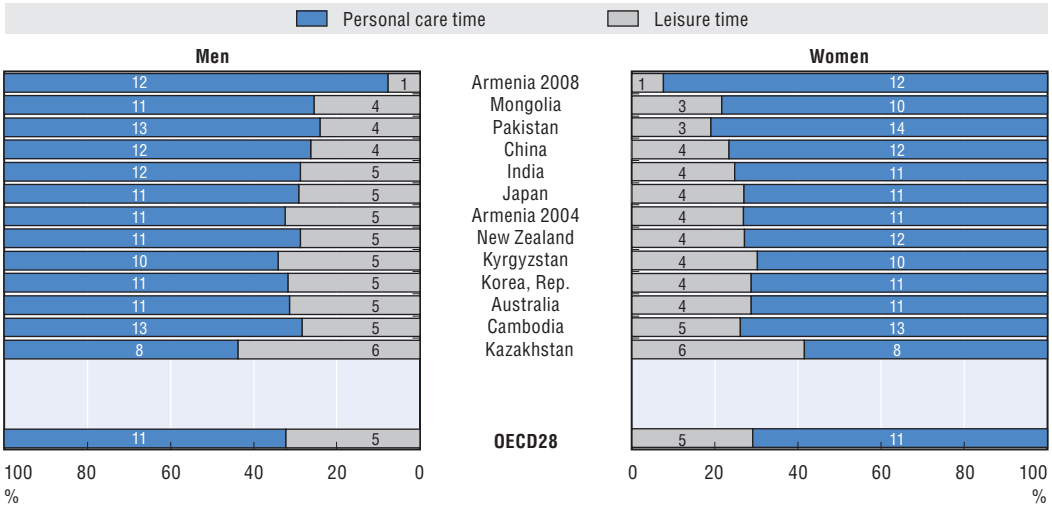
How do people actually allocate their free time? People spend most of it – well above half – on personal care, which means primarily sleeping time and secondarily eating time (Figure 1.6). The composition of free time varies greatly across the region. Personal care is an especially high share of free time in Armenia, at over 90%, and is especially low in Kazakhstan, at a bit above 50%.

Figure 1.6. **Personal care represents more than three-fifths of people's free time**

Leisure and personal care time and their share in total free time, in hours per average day



Note: Countries are ranked by women's leisure time.

Source: See Table 1.1 on available Time-use Surveys.

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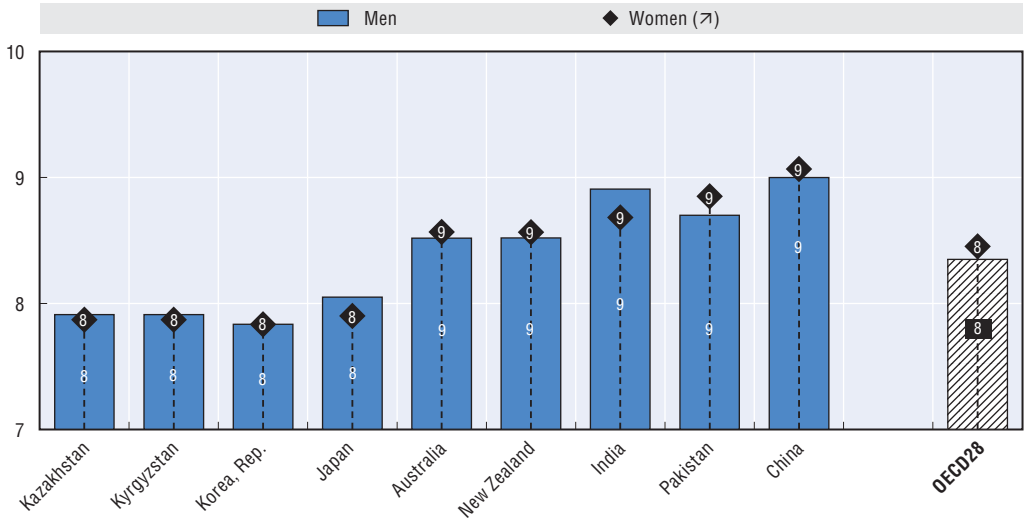
In all countries except the Republic of Korea, people dedicate at least half of their free time to sleeping (Figure 1.7). Except in Pakistan, where people spend the longest time on personal care, sleep represents more than 70% of the total time dedicated to personal care. Sleeping time tends to be similar in geographically proximate countries (Figure 1.7). The Republic of Korea and Japan are the two countries where people sleep the least, with less than 8 hours sleep per 24 hours. Sleeping times are the same in Australia and New Zealand and in Kazakhstan and Kyrgyzstan. In the former two countries men and women sleep on average, respectively, 511 and 514 minutes (8 hours and a half) per 24 hours whereas in Kazakhstan and Kyrgyzstan men sleep 475 minutes and women 472 minutes (approximately 8 hours). People sleep the most in China, with 9 hours of sleep (540 and 544 minutes of sleep for men and women, respectively).

There are no strong gender differences in hours of sleep. Although on average women have less free time than men (since they work more), they do not sleep less. In Japan, where the gender gap in sleeping time is the largest, women sleep only 10 minutes less than men. Biddle and Hamermesh (1990) found that the fact of having young children reduces sleep times only of mothers; they also showed that paid work and higher educational attainment tend to reduce hours of sleep. Indeed, in their model, higher wage rates reduce the hours of sleep because individuals have a greater incentive to spend time in the labour market as income (and thus the price of time) increases. This effect is even higher for men than for women.

Figure 1.7. **The Chinese sleep the most**

Time spent on sleep in hours per 24 hours



Note: Countries are ranked by women's sleeping time.

Source: See Table 1.1 on available Time-use Surveys.

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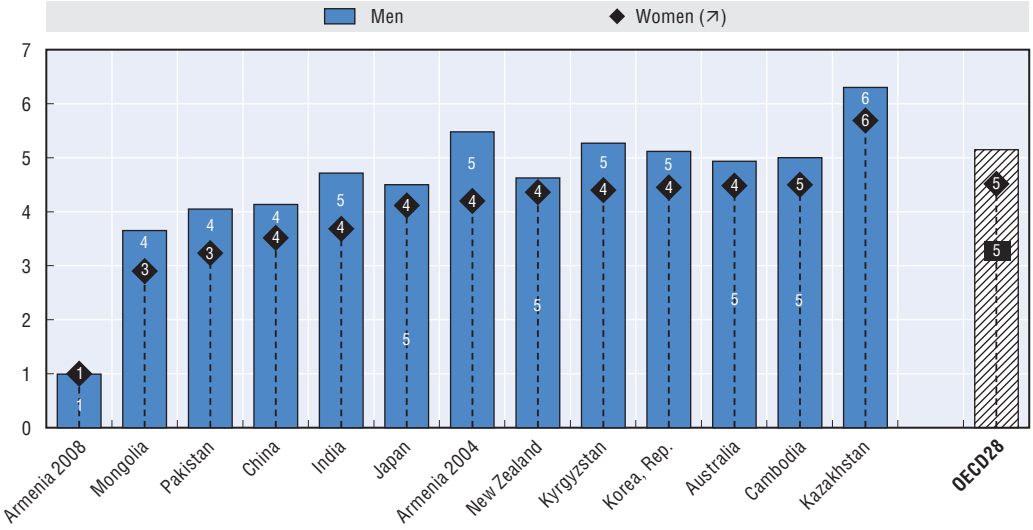
Turning from personal care time to the other major component of free time – leisure – people in Asia/Pacific countries and economies spend more than 10% of their time on leisure activities (Figure 1.8), though this is less than in OECD countries. Mongolian women spend the least time on leisure, with three hours per day (174 minutes) on average, whereas men in Kazakhstan spend the longest time on leisure activities, with more than 6 hours (378 minutes) per day, representing 27% of daily time. However, as already

Figure 1.8. **People have the longest leisure time in Kazakhstan**

Leisure time in hours per average day, by country and gender



Source: See Table 1.1 on available Time-use Surveys.

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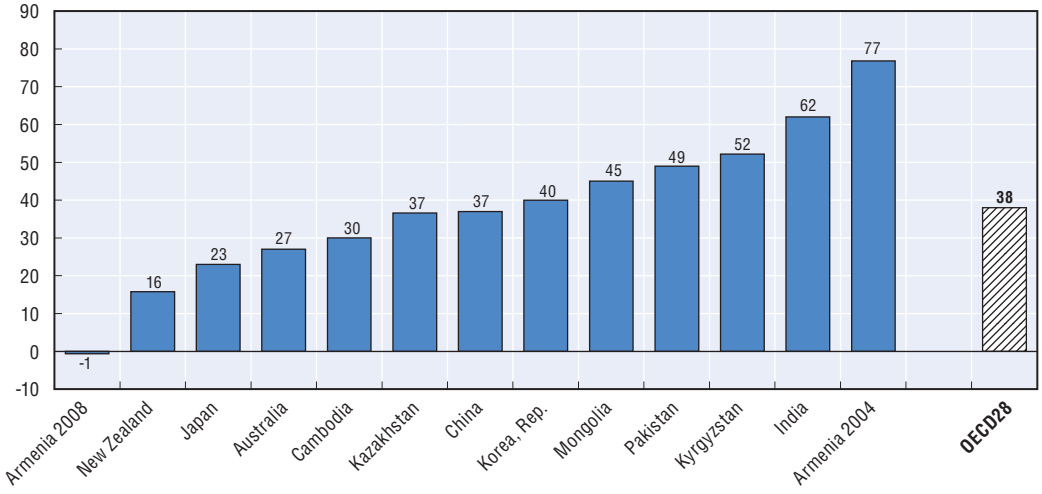
mentioned, the Kazakhstan data on leisure includes time spent on volunteering activities, while data for other countries classify volunteering in non-market work. This categorisation issue may bias the Kazakh leisure time upward. Nevertheless, the bias should not be large, given that on average the time dedicated to volunteering is low.[3]

Men have more leisure time than women (Figure 1.9), with on average 39 minutes more per day. The gender gap in leisure time is the highest in Armenia, with a difference of over one hour. The smallest gap, 16 minutes, is found in New Zealand.

Figure 1.9. **Men have more leisure time than women**

Gender gap in leisure time in minutes per average day



Source: See Table 1.1 on available Time-use Surveys.

StatLink http://dx.doi.org/10.1787/888932546148

Conclusion

Although reliable and comparable data is limited, much can still be learned on time use in Asia/Pacific countries and economies. The accent in this special chapter was on total working time and free time. It showed that important disparities exist across countries and gender in terms of both the types and duration of work time. In the large majority of countries, women work more than men. This difference is driven by the time spent on non-market unpaid work. Time-use data tends to underline that women do contribute to wealth creation when performing housework and caring activities.

Differences in the way people allocate their free time to various activities exist as well, although no strong gender/geographic pattern emerges. Nonetheless, the time spent on sporting activities, on inactive leisure activities (such as watching TV) or on sleep has implications for personal development and health.

The type of activities people engage in is directly related to life satisfaction. People experience different feelings of satisfaction, anxiety, nervousness or reward depending on the activity being performed, and this affects their mental state. For instance, among a sample of 625 Germans, outdoor activities and watching TV were found to be the most pleasurable, with volunteering and working the most rewarding (White and Dolan, 2009).

The feelings associated with each daily activity may vary according to the society and the individual, but are definitely linked to subjective well-being.

All these elements can be of great use to government agencies as they monitor and design public policies. Additionally, gender differences in time use, especially in work time, as explained in this chapter, should be taken into account when designing any labour policy, since policies in this field can have differentiated gender impact. More generally, learning about people's time allocation ensures a better understanding of a society for policymakers who are concerned with the efficiency and equity of their policies.

Thus, conducting surveys on time use on a regular basis is highly desirable for every country. Longitudinal data on time use – which is scarce today – would make possible comparisons in time use patterns across time. Furthermore, international comparisons of time use, which would be facilitated by a substantial effort to harmonise activity categories at the global level, would allow researchers to enquire more deeply into countries' socio-cultural specificities and to think in a more advised way about suitable social policies.

Notes

1. *http://unstats.un.org/unsd/methods/timeuse/icatus/icatus_2.htm*.
2. When possible time spent on travel is classified in the category of the activity to which it is linked. When there is no information on the purpose of the travel, travel time is included in the "Other" category.
3. On average, the time dedicated to the care of non-household members and to community services is seven minutes per day (this average is calculated for nine countries and does not include Cambodia or Kazakhstan, since data for these countries are not available). However, if we do not include New Zealand where the time dedicated to care of non-household members and to community services is the highest (with 35.5 minutes per day for women and 28 minutes for men), the average falls to four minutes per day.

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Chapter 2

Interpreting OECD Social Indicators

The purpose of social indicators

Society at a Glance 2011 provides information about two questions:

- Compared with their own past and with other OECD countries, what progress have countries made in their social development?
- How effective have been societies' efforts to further their own development?

Addressing the first question about societal progress requires indicators that cover a broad range of social outcomes across countries and over time. As social development requires improvements in health, education and economic resources, as well as a stable basis for social interactions, indicators have to be found for all these dimensions.

The second question about societal effectiveness is even more challenging to answer. Societies try to influence social outcomes, often through government policy. Whether policies are effective in achieving their aims is a critical issue. Indicators help to make that assessment. A first step is to compare the resources intended to change outcomes across countries and contrast those resources with social outcomes. While this comparison is far from being a comprehensive evaluation of policy effectiveness, indicators can contribute to highlighting areas where more evaluative work may be needed.

The framework of OECD social indicators

The structure applied here is not a full-scale framework of social indicators. But it is more than a simple list of indicators. This framework has been informed by experiences in other parts of the OECD on policy and outcome assessment in a variety of fields. It draws, in particular, on the OECD experience with environmental indicators. These indicators are organised in a framework known as "Pressure-State-Response" (PSR).* In this framework human activities exert *pressures* on the environment, which affect *the state* of natural resources and environmental conditions, and which prompt a *societal response* to these changes through various policies. The PSR framework highlights these sequential links, which in turn helps decision-makers and the public to interconnections that are often overlooked.

A similar approach for social indicators is followed in this report. Indicators are grouped along two dimensions their nature and the policy fields that they cover. The first dimension is broken down into three areas:

1. ***Social context*** refers to variables that, while not usually direct policy targets, are crucial for understanding the social policy context. For example, the proportion of elderly people in the total population is not a policy target. However, it is relevant information about the social landscape in which, for example, health, taxation or pension policy

* The PSR framework is itself a variant of an approach that has also given rise to the "Driving force-State-Response" (DSR) model used by the United Nations Committee for Sustainable Development; and the "Driving force-Pressure-State-Impact-Response" (DPSIR) model used by the European Environment Agency.

responses are made. Unlike other indicators, trends in social context indicators cannot be unambiguously interpreted as "good" or "bad".

2. ***Social status*** indicators describe the social outcomes that policies try to influence. These indicators describe the general conditions of the population. Ideally, the indicators chosen are ones that can be easily and unambiguously interpreted – all countries would rather have low poverty rates than high ones, for example.
3. ***Societal response*** indicators provide information about what society is doing to affect social status indicators. Societal responses include indicators of government policy settings. Additionally, the activities of non-governmental organisations, families and the broader civil society also involve societal responses. Comparing societal response indicators with social status indicators provides an initial indication of policy effectiveness.

While social indicators are allocated to one of the three groups above, the allocation between context and status categories is not always straightforward. For example, reducing fertility rates may be a policy objective in countries such as China, but in other countries, like Australia, low fertility rates are part of the context of social policy. Similarly, family breakdown can be regarded as a failure of public policies in some countries, whereas it may not be an explicit policy concern in others.

An important limitation of the social context, social status and societal response indicators used here is that these are presented at a national level. For member countries with a significant degree of federalism, such as the United States, Canada and Australia, indicators may not be reflective of the different regions within the federation, which may have different contexts, outcomes and social responses. This limitation should be borne in mind in considering the indicators presented below.

The second dimension of the OECD framework groups indicators according to the broad policy fields that they cover. Four broad *objectives* of social policy are used to classify indicators of *social status* and *societal response*:

1. **Self-sufficiency** is an underlying objective of social policy. Self-sufficiency is promoted by ensuring people's active social and economic participation, and their autonomy in activities of daily life.
2. **Equity** is another longstanding objective of social policy. Equitable outcomes are measured mainly in terms of access by people and families to resources.
3. **Health** status is a fundamental objective of health care systems, but improving health status also requires a wider focus on its social determinants, making health a central objective of social policy.
4. **Social cohesion** is often identified as an over-arching objective of countries' social policies. While little agreement exists on what it means, a range of symptoms are informative about a lack of social cohesion. Social cohesion is more positively evident in the extent to which people participate in their communities.

The selection and description of indicators

Asia/Pacific countries and economies differ substantially in the ways that they collect and publish social indicators. In selecting indicators for this report, the following questions were considered.

- What is the minimum degree of indicator comparability across countries? This report strives to present the best comparative information for each of the areas covered. However, the indicators presented are not confined to those for which there is "absolute" comparability. Readers are, however, alerted as to the nature of the data used and the limits to comparability.
- What is the minimum number of countries for which the data must be available? This report includes only indicators that are available for a considerable majority of Asia/Pacific countries and economies.
- What breakdowns should be used at a country level? Social indicators can often be decomposed at a national level into outcomes by social sub-categories, such as people's age, gender and family type. Pragmatism governs here: the breakdowns presented here vary according to the indicator considered.

Chapters 4 to 8 describe the key evidence.

Individual indicators can be relevant for multiple areas of social policy. That is to say, they could plausibly be included under more than one category. For example, the ability to undertake activities of daily living without assistance is potentially an indicator of social cohesion, self-sufficiency and health. Indicators are presented here under the category for which they are considered to be most relevant.

Throughout this volume, the code associated with each indicator (*e.g.* GE1) is used to relate it to a policy field (as listed in the tables below), while a numbering of the indicators is used to simplify cross-references. While the name and coding of indicators used in this volume may differ from those in the previous issue of *Society at a Glance: Asia/Pacific,* an effort is made to assure the continuity of the areas covered.

General social context indicators (GE)

When comparing *social status* and *societal response* indicators, it is easy to suggest that one country is doing badly relative to others, or that another is spending a lot of money in a particular area compared with others. It is important to put such statements into a broader context. For example, national income levels vary across OECD countries. If there is any link between income and health, richer countries may have better health conditions than poor ones, irrespectively of societal responses. If the demand for health care services increases with income (as appears to be the case), rich countries may spend more on health care (as a percentage of national income) than poorer countries. These observations do not mean that the indicators of health status and health spending are misleading. They do mean, however, that the general context behind the data should be borne in mind when considering policy implications.

General context (GE) indicators, including fertility, marriage and divorce, migration and the support rate, provide the general background for the other indicators in this report. GDP per capita is a social outcome in its own right, giving an indication of the average material well-being of that society.

Table 2.1. **List of general context indicators (GE)**

GE1. GDP per capita
GE2. Fertility
GE3. Marriage and divorce
GE4. Migration
GE5. Support rate

Self-sufficiency (SS)

For many people, paid employment (SS1) provides income, identity and social interactions. In addition, social security systems are funded by contributions by paid working people. Hence promoting higher paid employment is a priority for most countries. Being unemployed (SS2) means that supporting oneself and one's dependants is difficult, despite being available for work. Education (SS3) provides information on human capital accumulation. A better education enables longer term self-sufficiency now and in the future, including in paid employment. Early childhood education provides a foundation for future learning, as well as freeing up mothers to choose to work (SS4). Education spending provides information on the primary social response made by governments to help ensure self-sufficiency (SS5).

Table 2.2 lists the indicators of social status and societal response that are most relevant for assessing whether OECD countries have been successful in meeting the goals of assuring the self-sufficiency of people and their families.

Table 2.2. **List of self-sufficiency indicators (SS)**

Social status	Societal responses
SS1. Employment	
SS2. Unemployment	
SS3. Education	
SS4. Early childhood education	
SS5. Education spending	
EQ1. Poverty	*EQ5. Social spending*
EQ2. Income inequality	

Note: Indicators in italics are those that, while presented in another sub-section, are also relevant for an assessment of self-sufficiency.

Equity (EQ)

Equity has many dimensions. It concerns the ability to access social services and economic opportunities, as well as equity in outcomes. Opinions vary widely as to what exactly entails a fair or a just distribution of opportunities. Additionally, as it is hard to obtain information on all dimensions of equity, the *social status* equity indicators are focussed on inequality in financial resources.

Poverty (EQ1) is a natural starting point for considering equity at the bottom of society. Absolute measures of poverty are used here, since many of the region's countries are very poor. In addition to an absolute poverty measure, an indicator of relative inequality across the distribution is also considered (EQ2). Differences in the life chances of boys and girls are an important feature of several larger Asia/Pacific countries and economies, and these are addressed by consideration of the sex ratio (EQ3). Pension coverage and the old-age

Table 2.3. **List of equity indicators (EQ)**

Social status	Societal responses
EQ1. Poverty	EQ5. Social spending
EQ2. Income inequality	
EQ3. Gender ratio	
EQ4. Pensions	
SS1. Employment	*HE5. Health expenditure*
SS2. Unemployment	
SS3. Education	

Note: Indicators in italics are those that, while presented in another sub-section, are also relevant for an assessment of equity outcomes.

replacement rate are important indicators of the extent to which society treats its older people in an equitable fashion (EQ4). Many Asia/Pacific countries and economies have social protection systems that redistribute resources and insure people against various contingencies. These interventions are summarised by public social spending (EQ5).

Health (HE)

The links between social and health conditions are strong. Indeed, educational gains, accompanied by public health measures, better access to health care and continuing progress in medical technology, have contributed to significant improvements in health status, as measured by life expectancy (HE1). To a significant extent, improvements in life expectancy reflect lower infant mortality (HE2). Water and sanitation (HE3) are important public health issues in many Asia/Pacific countries and economies, and are linked to both life expectancy and infant mortality via the transmission of disease. Adult height gives an indication of cumulated net nutrition and the burden of disease of adults over their entire period of childhood (HE4). Health spending (HE5) is a general and key part of the policy response of health care systems to concerns about health conditions. Nevertheless, sometimes health problems are rooted in interrelated social conditions – such as unemployment, poverty and inadequate housing – that are beyond the reach of health policies. Moreover, the effectiveness of health interventions often depends less on spending levels *per se* than on other characteristics of the health care system, such as low coverage of medical insurance or the role of co-payments, which may act as barriers to seeking medical help.

Table 2.4. **List of health indicators (HE)**

Social status	Societal responses
HE1. Life expectancy	HE5. Health expenditure
HE2. Infant mortality	
HE3. Water and sanitation	
HE4. Adult height	
	EQ5. Social spending

Note: Indicators in italics are those that, while presented in another sub-section, are also relevant for an assessment of health outcomes.

Social cohesion (CO)

Promoting social cohesion is an important social policy goal in many countries. However, because there is no commonly-accepted definition, identifying suitable

indicators is especially difficult. In *Society at a Glance: Asia/Pacific*, considerable effort has gone into finding new and better indicators of social cohesion. The approach taken in *Society at a Glance* is to assess social cohesion through indicators that describe the extent to which citizens participate in societal life and derive satisfaction from their daily activities, indicators that inform about various pathologies and conditions that put affected people at risk of social exclusion, or indicators that reveal the extent of social strife.

Life satisfaction is strongly associated with good family relationships and confidence in the broader society (CO1). A general measure of trust in other people (CO2) may indicate the degree to which economic and social exchange is facilitated, enhancing well-being and facilitating socially productive collective action. Pro-social behaviour is behaviour that contributes to the positive functioning of society, such as giving one's money or time or helping strangers. Anti-social behaviour, such as corruption, is the contrary (CO3). The intentional killing of oneself is not just evidence of a personal breakdown, but also of a deterioration of the social context in which a person lives (CO4). High voter turnout indicates that a country's political system enjoys a high level of participation, increasing its effectiveness and reflecting a broad public consensus about its legitimacy (CO5).

Table 2.5. **List of social cohesion indicators (CO)**

CO1. Life satisfaction
CO2. Trust
CO3. Social behaviour
CO4. Suicide
CO5. Voting

What can be found in this publication

In each of the five domains covered in Chapters 4 to 8 of this report, there is a page of text and a page of charts for each of the five indicators. Both charts and text are, to a degree, standardised. The text typically commences with a very brief justification for inclusion of the indicator. Both the text and charts then address the most recent headline indicator data, with country performances ranked from best to worst. Changes in the indicator over time are then considered on a chart to the right. Providing a standardised introduction and opening charts for each of the 25 indicators is intended to facilitate interpretation by the reader. The choice of the time period considered for changes is partly determined by data constraints. However, ideally changes are examined either 1) over the last generation, to compare how society is evolving in the longer term, or 2) over the period of the current economic crisis, so the extent to which recent adverse economic events are influencing social indicators can be studied. Having addressed the indicator and the changes, the text and charts then typically consider interesting alternative breakdowns of the indicator, or relationships with other social outcomes or policies. For each indicator, an opening boxed section on "Definition and measurement" provides the definitions of the data used and a discussion of potential measurement issues. Finally, suggestions for further reading are sometimes given.

Chapter 3

Society at a Glance: An Overview

Society at a Glance: Asia/Pacific 2011 uses the 25 social indicators presented below. There is obvious value in providing a short summary – hence *Society at a Glance*: An Overview. In *Society at a Glance 2009*, a summary was provided through a table that selected two indicators per domain, chosen on the basis of their *a priori* importance and through consultation with member countries, and assigned "green circle" for performance in the top two deciles, "yellow triangle" for performance in the middle six deciles and "red diamond" for the bottom two deciles.

A very similar "traffic light" approach is taken below, but including all relevant indicators. Some of the 25 indicators are excluded because they are not capable of unambiguous interpretation (a higher value being desirable and a lower value being undesirable, for example). For the general context (GE) indicators, only household income is capable of an unambiguous interpretation, so the others are excluded. Additionally, the social response indicators (education, social and health spending) are not included, as these are policy inputs, not social outcomes.

A similar traffic lights table could also be constructed for changes in indicators. However this was not done, for data reasons. First, change data are missing for many more countries than levels data, and hence such a table is much less informative as a summary. Second, changes cannot be considered over consistent periods. Indeed, it is not clear over what period changes should be compared. For some indicators, which change only slowly, longer periods may be more desirable than for indicators that can change fairly rapidly over short periods.

These exclusions leave 18 out of the 25 social indicators to be summarised in Table 3.1. Circles are the top two deciles, triangles are the middle six deciles and diamonds are the bottom two deciles. Blanks are placed where there is no country indicator information.

It is necessary to make numerous caveats about the meaning and interpretation of Table 3.1 in terms of national comparisons. Different governments and different countries will have different policy priorities. Their priorities may be economic outcomes (inflation, GDP, or fiscal balance, for example) rather than social outcomes such as those considered here. In such a case, having all red social outcomes in Table 3.1 may be the price they are willing to pay for success elsewhere. Or, given a focus on social outcomes, they may be willing to trade-off many "diamonds" for the one "circle" social outcome they deem most desirable. Alternatively, there may be other social outcomes, not considered here, which are stronger priorities at a national level than the ones that have been chosen for international comparisons here. Observed patterns of diamonds, triangles and circles may simply reflect national differences in preferences for outcomes. Equally, observed patterns may reflect that social outcomes change relatively slowly, rather than current or even recent policy settings. Lastly, the trade-offs between social outcomes may vary between countries because of societal or cultural differences that are unrelated to policy choices, making it easier for some countries to generate outcomes for a given policy effort. For all these reasons, we caution against ranking country performance by an aggregate social index, such as summing the numbers of green or red lights across indicators.

Table 3.1. **Overview of the social situation in Asia/Pacific countries and economies**

"Circles" (●) denotes countries are in the top two deciles, "diamonds" (◆) those in the bottom two deciles and "triangles" (▲) those in the six intermediate deciles

	GE1	SS1	SS2	SS3	SS4	EQ1	EQ2	EQ3	EQ4	HE1	HE2	HE3	CO1	CO2	CO3	CO4	CO5
	GDP per capita, (2009 USD)	Employment rates (%)	Unemployment rates (%)	Average years of total schooling	Participation rates in early childhood education (%)	Share of population living with less than USD 2 per day (%)	Gini coefficient, %	Gender ratio (population 0-4 yr) Ratio defined as sex ratio as number of males per 100 females	Coverage of the pension system, % of labour force	Life expectancy at birth, total population, years	Infant mortality rate (per1 000 live births) both sexes	Proportion of total population served with improved sanitation (%)	Well-being score on a scale of 10 ladders	Share of people expressing trust in others, %	World Giving Index score (scale 0 to 1)	Suicide (deaths per 100 000 population)	Voter turnout (%)
	2008	2009	2009	2010	Mid-2000s	Mid-2000s	Mid-2000s	Mid-2000s	Latest year available	2008	2008	Latest year available	Latest year available	Latest year available	2009	Mid-2000s	Latest year available
Armenia	▲	◆	◆	●	▲	▲	●	◆	▲	▲	▲	▲	◆	▲	▲	●	◆
Australia	●	▲	▲	●	●	..	●	▲	●	●	●	●	●	●	●	▲	●
Azerbaijan	▲	●	▲	..	▲	●	●	◆	▲	▲	▲	◆	▲	▲	▲	●	..
Bangladesh	◆	..	..	▲	▲	◆	●	●	◆	▲	▲	▲	▲	▲	◆	▲	●
Bhutan	▲	●	▲	..	..	▲	▲	●	◆	◆	▲	▲	..	..	..	▲	▲
Brunei Darussalam	●	▲	▲	▲	▲	..	..	▲	▲	●	●	..	..	..	..	●	..
Cambodia	◆	..	..	▲	◆	▲	▲	▲	..	◆	◆	◆	◆	..	◆	▲	▲
China	▲	●	▲	▲	▲	●	▲	◆	▲	▲	▲	▲	◆	●	◆	◆	..
Fiji	▲	◆	◆	●	▲	..	◆	▲	..	▲	▲	..	..	..	..	●	▲
Hong Kong (China)	●	▲	▲	▲	..	..	◆	◆	●	●	●	..	▲	▲	●	▲	..
India	▲	..	..	◆	▲	◆	◆	◆	◆	◆	◆	◆	▲	▲	▲	◆	◆
Indonesia	▲	▲	◆	▲	▲	▲	◆	●	..	▲	▲	▲	▲	▲	▲	▲	▲
Japan	●	▲	▲	●	●	..	▲	▲	●	●	●	●	●	▲	▲	◆	▲
Kazakhstan	▲	●	▲	▲	▲	●	●	▲	▲	▲	▲	●	▲	..	▲	◆	▲
Korea, DPR	..	..	..	..	..	..	..	▲	..	▲	▲	..	..	..	..	▲	..
Korea, Rep.	●	▲	▲	..	●	..	●	◆	▲	●	●	●	●	▲	▲	◆	◆
Kyrgyzstan	▲	▲	◆	▲	▲	▲	▲	..	▲	▲	▲	▲	▲	◆	▲	▲	▲
Lao PDR	◆	..	..	◆	◆	◆	▲	●	..	◆	▲	..	▲	..	●	◆	●
Macao (China)	▲	..	..	▲	●	..	▲	▲	..	▲	..	..	..	..	..	▲	..
Malaysia	▲	▲	▲	▲	..	●	▲	▲	▲	▲	▲	▲	▲	◆	▲	▲	▲
Maldives	▲	..	..	▲	▲	..	▲	●	▲	▲	▲	●	..	..	..	◆	▲
Mongolia	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	◆	..	▲	▲	▲
Myanmar	◆	..		◆	..	..	..	●	..	◆	◆	▲	▲	..	●	▲	..
Nepal	◆	..	..	◆	▲	◆	◆	▲	◆	▲	▲	◆	▲	..	▲	▲	◆
New Zealand	▲	▲	▲	▲	▲	▲	▲	▲	●	●	●	..	●	●	●	▲	▲
Pakistan	▲	◆	▲	◆	..	▲	●	▲	◆	▲	◆	◆	▲	▲	◆	▲	◆
Papua New Guinea	▲	..	..	◆	..	▲	◆	▲	..	◆	◆	◆	..	..	..	▲	▲
Philippines	▲	▲	◆	▲	..	▲	▲	▲	▲	▲	▲	▲	▲	◆	▲	●	◆
Samoa	▲	▲	●	..	▲	..	▲	◆	..	▲	▲	●	..	..	..	▲	▲
Singapore	●	▲	▲	▲	..	..	◆	▲	●	●	●	..	●	◆	▲	▲	●
Sri Lanka	▲	◆	▲	▲	..	▲	▲	●	▲	▲	▲	▲	◆	..	●	◆	▲
Tajikistan	◆	..	●	▲	◆	▲	▲	▲	..	▲	◆	▲	▲	..	▲	●	●
Thailand	▲	●	●		●	●	▲	▲	▲	▲	▲	▲	●	▲	▲	▲	▲
Timor-Leste	◆	..	..	..	◆	◆	▲	▲	..	◆	▲	▲	..	..	..	▲	..
Tonga	▲	..	..	●	▲	..	▲	▲	..	▲	▲	●	..	..	..	●	..
Viet Nam	▲	◆	●	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	●	◆	▲	●

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Chapter 4

General Context Indicators

GE1. GDP per capita

Gross Domestic Product per person (GDP per capita) is the most widely used comparative indicator of economic performance. It measures the sum of marketed goods and services produced within the national boundary, averaged across everyone who lives within the national boundary.

There are vast differences in GDP per capita across the region (Panel A, GE1.1). The region includes some of the richest as well as some of the poorest countries in the world. Australia's GDP per capita is 180 times higher than that of Myanmar. The Asia/Pacific OECD countries have relatively high GDP per capita, as do Brunei, Singapore and the Hong Kong (China) economy. Other countries with very low GDP per capita include Timor, Nepal, Bangladesh and the Lao People's Democratic Republic. Differences in GDP per capita within the Asia/Pacific region are much greater than within the OECD.

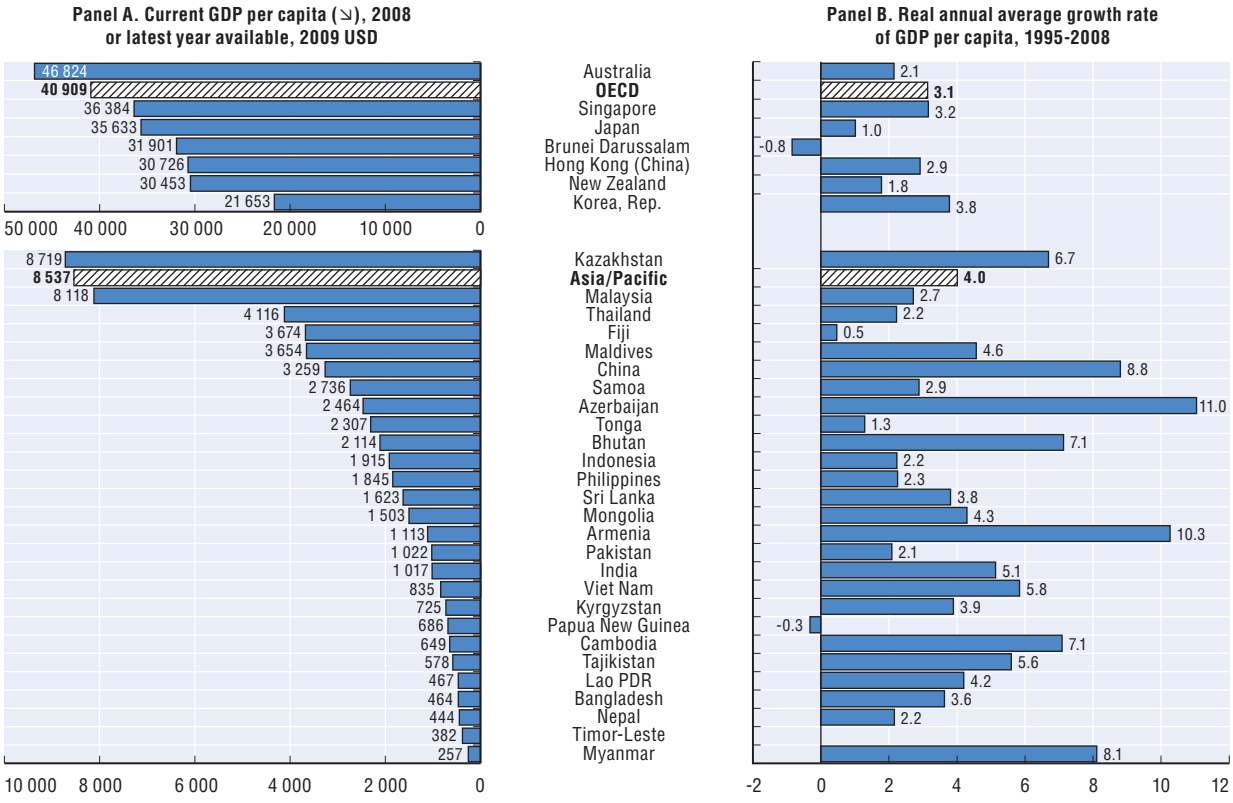
Equally, there are massive differences in per capita GDP growth rates between 1995 and 2008 (Panel B, GE1.1). Annual average growth rates span from a negative nearly 1% in Brunei to rates in excess of a positive 8% in Myanmar, China, Armenia and Azerbaijan. The large Indian emerging economy was also a strong performer. It is interesting to note that the six lowest performers on GDP growth were all island nations – Brunei, Papua New Guinea, Fiji, Japan, Tonga and New Zealand – albeit with very different levels of economic development.

Poorer countries in the Asia/Pacific region are tending to grow at a faster rate than richer ones (GE1.2).There is a negative correlation between the pace of growth in GDP per capita over the period 1995-2008 and the initial level of GDP per capita in 1995. Thus poorer countries are catching up to richer ones in the region, providing evidence for economic theories of GDP convergence. Azerbaijan, Armenia and China are catching up more rapidly than one would predict given their level of GDP, while Nepal and Papua New Guinea are performing at lower rates than would be expected (Papua is actually diverging).

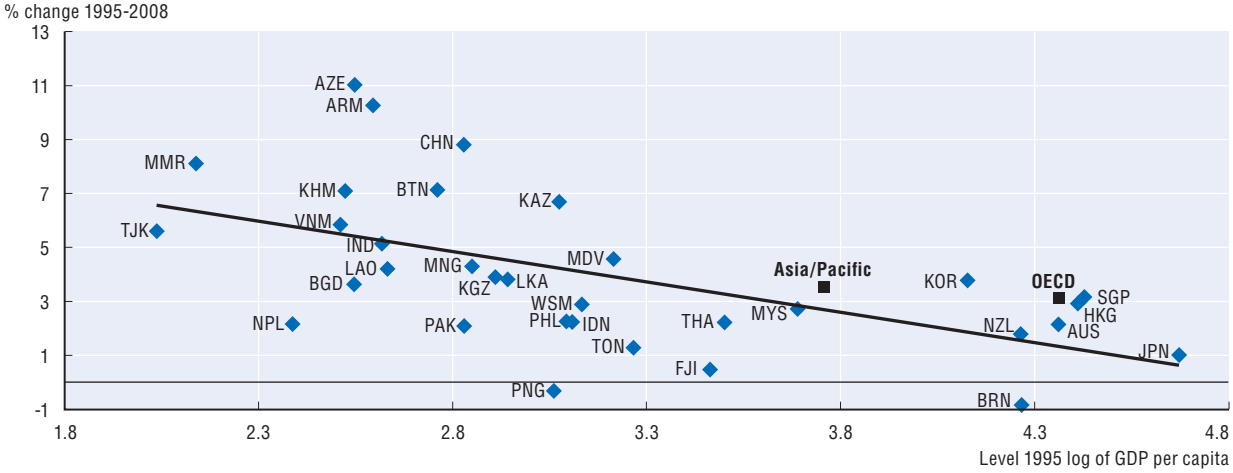
Definition and measurement

Among the different measures available in the System of National Accounts (SNA), Gross Domestic Product (GDP) per capita is the one most commonly used for comparing the sizes of economies across countries. GDP per capita is calculated using a country's GDP in 2009 USD and dividing that by the country's total population. The 2009 USD value is used to convert national currencies so that cross-national comparisons can be made. Annual average growth rates in GDP per capita are calculated using GDP per capita expressed in constant national currency. The data comes from the *2009 International Monetary Fund World Economic Outlook* online database (*www.imf.org/external/pubs/ft/weo/2009/02/weodata/weoselco.aspx?g=2001&sg=All+countries*).

GE1.1. **GDP per capita and recent trends**



GE1.2. **GDP per capita is converging across the Asia/Pacific region**



Source: Data from the *2009 International Monetary Fund World Economic Outlook* online database (*www.imf.org/external/pubs/ft/weo/2009/02/weodata/weoselco.aspx?g=2001&sg=All+countries*).

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GE2. Fertility

The total fertility rate indicates the number of children an average woman will have in her life time. The population is replaced at a total fertility rate of a little over two, allowing for some mortality during infancy and childhood.

Fertility rates in Asia/Pacific countries and economies display huge disparities (GE2.1). In the Macao (China) economy, women have less than one child on average, whilst in Timor-Leste, women average 6.5 children. Fertility rates tend to be much lower in richer countries and economies (Hong Kong [China], the Republic of Korea, Japan, Australia and New Zealand), emerging economies excepting India (China, Thailand, Viet Nam and Indonesia) and in countries of the former Soviet Union (Armenia, Kazakhstan and Kyrgyzstan). High rates are found in Pakistan and the Pacific Islands – Timor-Leste, Papua New Guinea, Tonga and Samoa. Unlike the OECD, the majority of countries and economies in the Asia/Pacific group have fertility rates in excess of replacement.

There have been rapid declines in fertility rates over the last generation (GE2.1). Other OECD countries that already went through their demographic transition have experienced a much slower drop in fertility, at an average of 1% decrease annually. The various paces of fertility declines reflect the important variations in the stages of demographic transition across Asia/Pacific countries and economies. Countries such as the Republic of Korea, Mongolia, Viet Nam, Maldives, Thailand and China, which experienced very rapid declines in fertility, are now at the end of their demographic transition, with 2008 fertility rates almost comparable to the OECD's. The socio-economic conditions of many countries in Asia have provided a context in which many couples desire a small family, while fertility control is more widely considered as culturally acceptable. A fertility drop has sometimes been encouraged by restrictive policies, as in China with the one-child policy launched in the early 1970s.

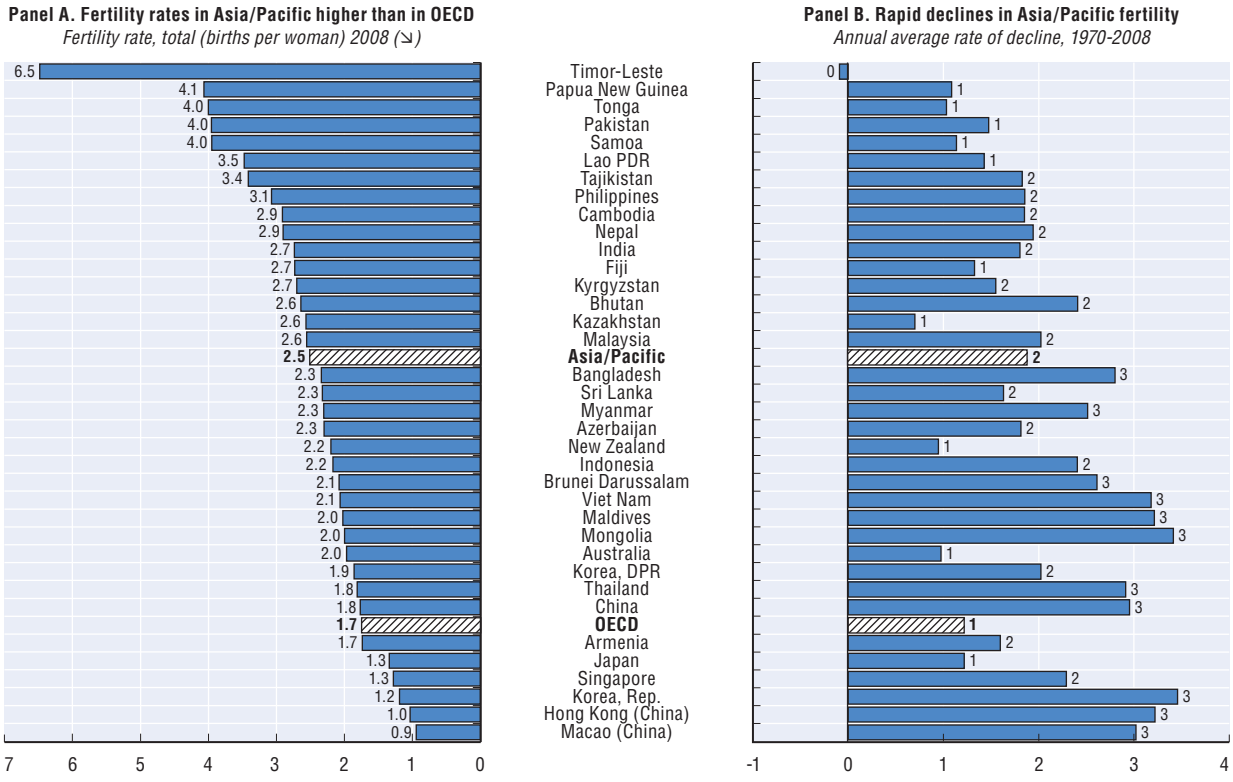
Birth rates are lower in richer countries (GE2.2). There is a negative correlation between GDP per capita and births per woman. Improvements in human development, such as higher health care expenditure (see HE2), improved life expectancy (see HE1) reduced mortality (see HE4), and increased female education and labour force participation rates (see EQ2, SS1 and SS3) play an essential role in reducing fertility rates. As a consequence, since decline in fertility is associated with socio-economic improvements in living standards, today poor countries are likely to experience future decreases in fertility as their level of income increases, as has happened for the OECD countries.

Definition and measurement

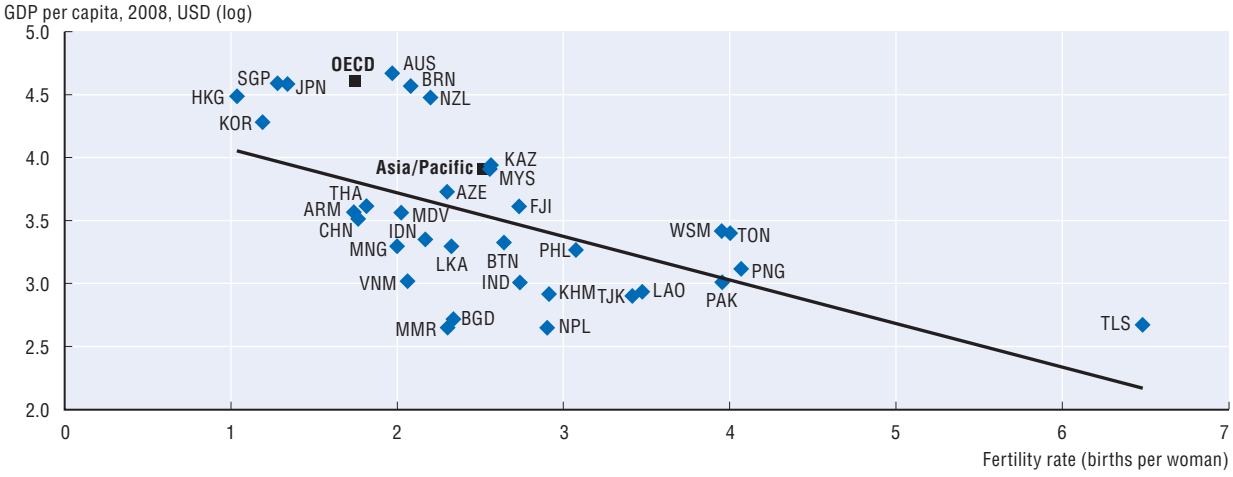
The total fertility rate in a specific year corresponds to the number of children that would be born to each woman if she were to live to the end of her childbearing years and if the likelihood of her giving birth to children at each life stage followed the currently prevailing age-specific fertility rates.

The data presented here are extracted from the World Bank's *World Development Indicators* online database (2009, *http://devdata.worldbank.org/dataquery*).

GE2.1. **Fertility rates and changes**



GE2.2. **Rich countries have higher fertility rates**



Source: The data presented here are extracted from the World Bank's World Development Indicators online database (2009, *http://devdata.worldbank.org/data-query*).

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GE3. Marriage and divorce

The formation of adult partnerships through marriage and their dissolution through divorce provides important information on a fundamental social institution in all Asia/Pacific countries and economies: families. Cultural attitudes and approaches to marriage as a form of adult partnering, as well as to divorce, differ substantially within the region.

There is important diversity in both marriage and divorce rates across Asia/Pacific countries and economies (Panel A, GE3.1). Crude marriage rates are highest in the Maldives, Tajikistan and Bangladesh. The lowest marriage rates are found in Samoa, Macao (China), New Zealand, Australia and Thailand. Turning to divorce rates, the crude divorce rate in the Maldives is three times higher than the average of the Asia/Pacific countries and economies. Divorce rates are low relative to high marriage rates in Viet Nam, Indonesia, Tajikistan, Mongolia, Azerbaijan and Armenia.

Over the past two decades, the changes were more pronounced in marriage rates than in divorce rates (Panel B, GE3.1). The marriage rate fell the sharpest in the Maldives, with a 4 percentage point decrease. At the same time, the drop in the Maldives' divorce rate was also the fastest, at 5 percentage points. Big rises in marriage rates were found in China, Tajikistan and Mongolia. Marriage declined in the wealthiest countries, such as the Republic of Korea, Japan, Australia, New Zealand and Singapore. Divorce rates are also increasing slowly but surely in the Republic of Korea, Hong Kong (China) and Japan, reflecting an upward trend since 1980. For instance, the Republic of Korea's crude divorce rate nearly doubled between 1980 and 2004.

Inter-generational patterns of family living also differ considerably across the Asia/Pacific region (GE3.2). Very high proportions of adult Indians, Thais and Bangladeshis live with their parents, whereas this pattern is uncommon in Australia and New Zealand. The differences may be cultural and may also be influenced by the scale of the welfare state, which substitutes for some family relationships. The nature of the housing stock and the housing market may also play a role. In almost all countries (Thailand and Viet Nam are exceptions), adult sons are more likely to live at home than the daughters, possibly reflecting traditions of patrilocality. Sex differences are especially apparent in Bangladesh, India and Pakistan.

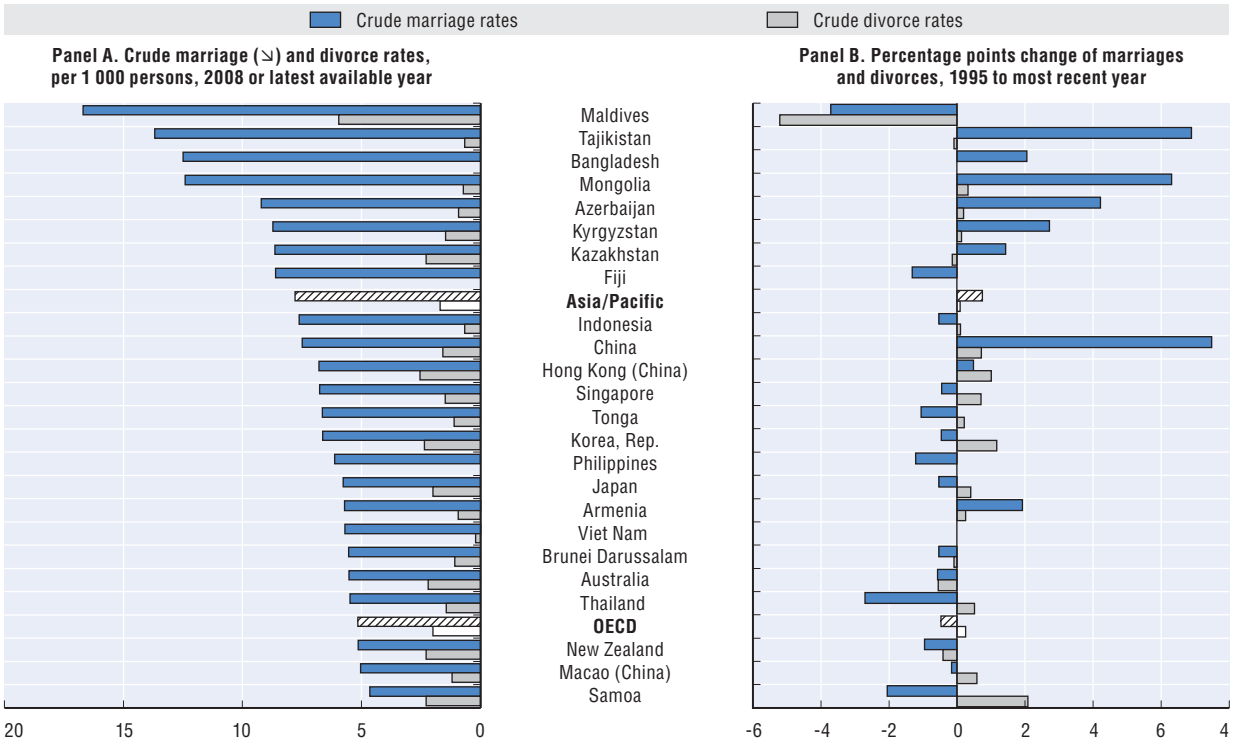
High marriage rates in China reflect a very high married proportion of the adult Chinese population (GE3.3). Indian and Indonesian patterns are similar. In a number of countries like New Zealand and Australia, cohabiting relationships are common. These are almost non-existent elsewhere. Separated or divorced adults are uncommon in China, India and Indonesia.

Definition and measurement

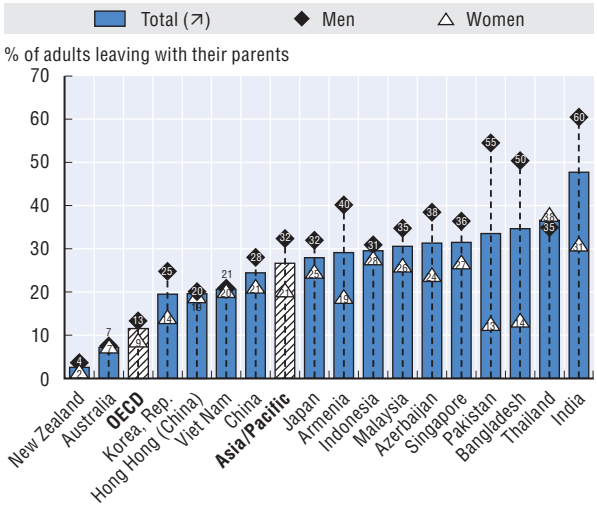
The crude marriage rate conveys the number of marriages formed each year as a ratio to the total adult population; similarly, the crude divorce rate is the number of marriages dissolved in a given year, also expressed with respect to the total adult population. Data on crude marriage rates and crude divorce rates are expressed per population of 1 000. The share of adults living with their parents refers to the number of people aged over 24 answering "yes" to the question "do you live with your parents?" divided by the total adult population aged over 24.

The data used here comes from the 1997 and 2008 *Demographic Yearbook* of the UN Department of Economic and Social Affairs' Statistics Division (*http://unstats.un.org/unsd/demographic/products/dyb/2000_round.htm*) and of the World Marriage data 2008 of the UN Department of Economic and Social Affairs' Population Division (*www.un.org/esa/population/publications/WMD2008/WP_WMD_2008/Data.html*). The data on adults living with their parents comes from the World Values Survey Database (*www.wvsevsdb.com/wvs/WVSAnalize.jsp*). The most recent available data was used for each country so that the time spread goes from 1997 to 2008. Weights provided in the database were used when available. Partner status data come from the Gallup World Poll.

GE3.1. **Marriage and divorce and recent trends**



GE3.2. **Adults living with their parents**



GE3.3. **Partner status in selected Asia/Pacific countries and economies**

% of adult population	Married (↘)	Domestic partner	Separated or divorced	Widowed	Single	Total
China	79	0	1	2	18	100
India	75	0	1	3	21	100
Indonesia	72	0	1	6	21	100
Japan	68	0	4	5	23	100
Korea, Rep.	63	0	1	3	34	100
Australia	54	8	6	4	27	100
New Zealand	53	12	6	4	25	100

Note: Dates refering to marriage data and those for divorce rates may differ.

Source: 1997 and 2008 Demographic Yearbook of the UN Department of Economic and Social Affairs' Statistics Division (*http://unstats.un.org/unsd/demographic/products/dyb/2000_round.htm*) and of the World Marriage Data 2008 of the UN Department of Economic and Social Affairs' Population Division (*www.un.org/esa/population/publications/WMD2008/WP_WMD_2008/Data.html*). The data on adults living with their parents comes for the World Values Survey Database.

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GE4. Migration

Immigrants can provide social and economic dynamism and bring considerable positive diversity to their new countries. For many countries and economies of the Asia/Pacific region, skilled emigration is a pressing policy issue. Other countries in the region, such as the Philippines and Samoa, rely considerably on emigrant remittances for their incomes.

There is an impressive variation in the share of international migrants in the total population across Asia (Panel A, GE4.1). In the three economies of Singapore, Macao (China) and Hong Kong (China) well over one-third of the population has been born off-shore. Australia and New Zealand also have high migrant shares, to a significant extent reflecting migration from elsewhere in the region. In China, migrants represented less than 0.05% of the total population in 2005 – a negligible share. The foreign-born population is also negligible – less than two in every 100 people – in 17 of the region's other countries.

In a small majority of the countries considered, net migration is negative – people are flowing out (Panel B, GE4.1). Between 2000 and 2005, emigration was largest in poorer island countries (Samoa, Tonga, Fiji, Sri Lanka) and countries of the former Soviet Union (Tajikistan, Armenia, Kyrgyzstan, Kazakhstan, Azerbaijan). The most important in-migration flows were in three country types. The first were the economically dynamic economies – Macao (China), Singapore and Hong Kong (China). The second were relatively wealthier countries such as Australia, New Zealand and Thailand. The third were countries such as Bhutan and Timor that had large emigration flows in previous periods for political reasons. Net migration rates hide migration flows of countries that have both large in and out-migration flows, such as the Philippines, where thousands of increasingly skilled labourers arrive and leave the country every year.

The share of international migrants in the total population is higher in richer countries (GE4.2). The wealthiest countries of the Asia/Pacific region, except Japan and the Republic of Korea where laws regarding the foreign-born are restrictive, host the highest shares of international migrants.

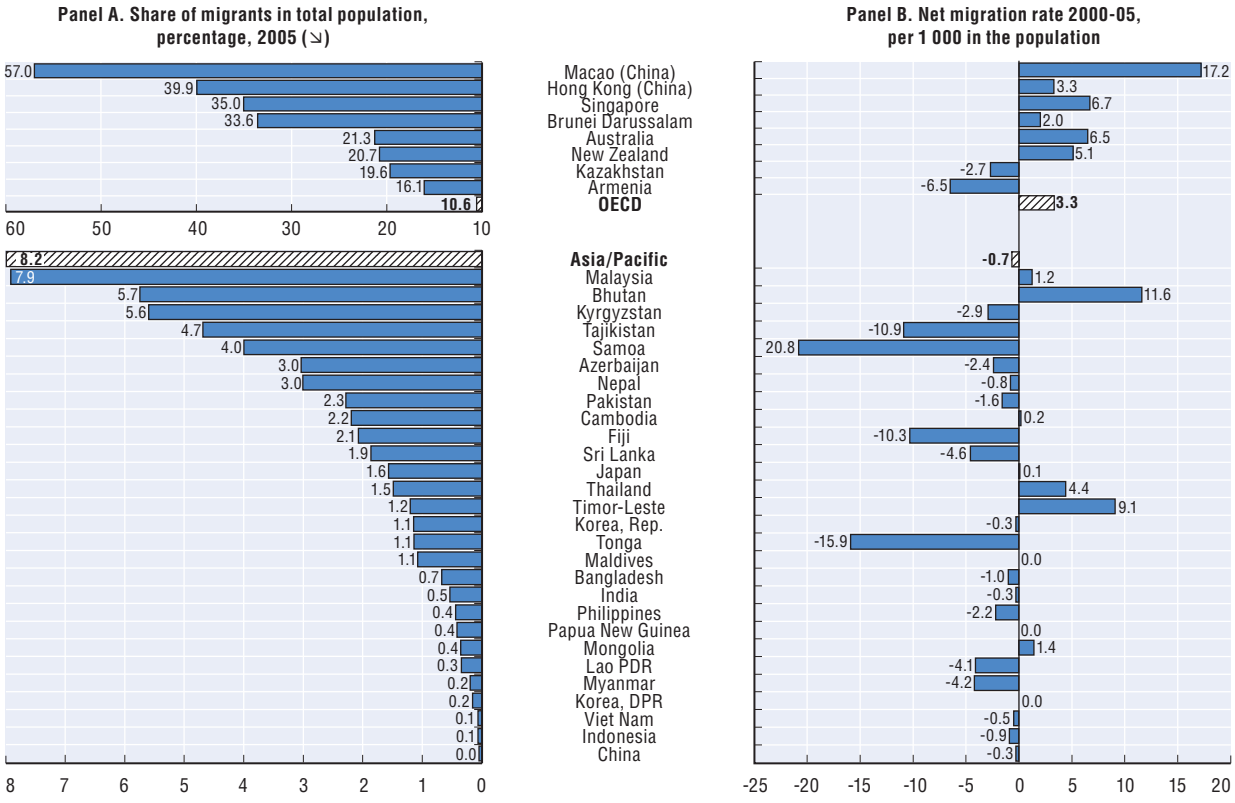
Some countries experience high migration rates combined with increases in the share of foreign-born people in the total population (GE4.3). Samoa, Fiji, Tonga and Tajikistan witnessed large flows of out-migration between 2000 and 2005 along with a growth in the share of international migrants, ranging from 4 percentage points for Fiji to 75 percentage points for Armenia over the same period.

Definition and measurement

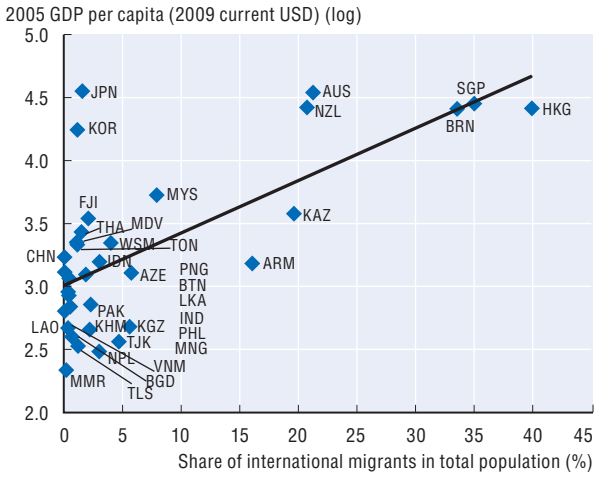
Place of birth is used to estimate the immigrant population. The international migrant stock is the number of people born in a country other than that in which they live, expressed as a share of the resident country's total population. The net migration rate is the number of immigrants minus the number of emigrants over a period of time divided by the population of the receiving country over that same period, expressed as the net number per 1 000 population. Although the inflow and outflow data are generally not comparable, the net migration statistics "net out" the main source of non-comparability in the flow data, namely short-term movements. However, it tends to hide migration of countries that have both large immigration and emigration.

The data on net migration comes from the United Nations' World Population Prospects Database (2008, *http://esa.un.org/unpp/*) and are based on "medium variant" population projections. Data on the migrant stock and on total population are from the World Bank Database (*http://data.worldbank.org/indicator/SM.POP.TOTL*). (Figure GE4.) There are vast differences in the share of international migrants in the total population across Asia/Pacific countries and economies.

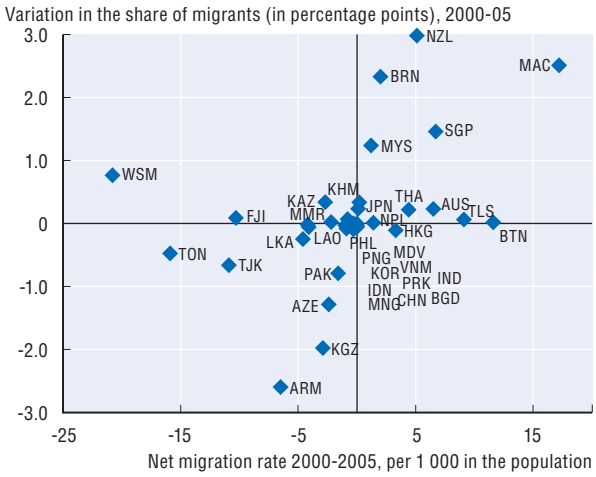
GE4.1. **Migration**



GE4.2. **Richer countries have a higher share of foreign-born population**



GE4.3. **High migration rates combined with increases in foreign-born people**



Source: The data on net migration comes from the United Nations' World Population Prospects Database (2008, *http://esa.un.org/unpp/*) and are based on "medium variant" population projections. Data on the migrant stock and on total population are from the World Bank Database (*http://data.worldbank.org/indicator/SM.POP.TOTL*). Figure GE4.2: There are vast differences in the share of international migrants in total population across Asia/Pacific countries and economies.

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GE5. Support rate

The support rate is the ratio of the population who are more likely to be economically active to children and older people more likely to be economically inactive. The support rate thus provides a rough indicator of the number of active people who potentially are economically and socially supporting inactive people. It also gives a broad indication of the age structure of the population. Changes in the support rate depend on mortality and fertility rates and, to a much lesser degree, on net migration.

There are substantial variations in support rates across Asia/Pacific countries and economies (GE5.1). Whereas the number of dependent people in economies like Macao (China), Hong Kong (China) and Singapore is not higher than 35 per 100 persons, in Nepal, the Lao People's Democratic Republic and Pakistan, this number is doubled, with almost 70 dependants for 100 persons. In terms of the total dependency ratio, OECD and Asian countries and economies do not differ much, with a ratio of one dependent out of two people. However, the age structure of the dependent persons is very different in developing countries compared to OECD countries. In developing countries, the total dependency ratio is driven by the youth-dependency ratio, whereas in OECD countries, the share of old people in the total working population is higher. This is due to both longer life spans (see HE1) and lower birth rates (see GE3) in the OECD countries, which are producing a population distribution that is slanted towards the elderly.

At the same time, in the majority of countries the dependency ratio is likely to increase in the future. Whereas the ratio of dependants on the working population decreased in all Asia/Pacific countries and economies but Japan during the past 20 years (Figure GE5.2), the trend is going to reverse in the future, with an increase in the dependency ratio for most countries in the region. According to projections, changes will happen at a faster rate in the 40 years to come. Changes in the dependency ratio will be driven mostly by the increase in old-age dependency rates that will keep on increasing in the future at an increasingly rapid pace, especially for developing countries.

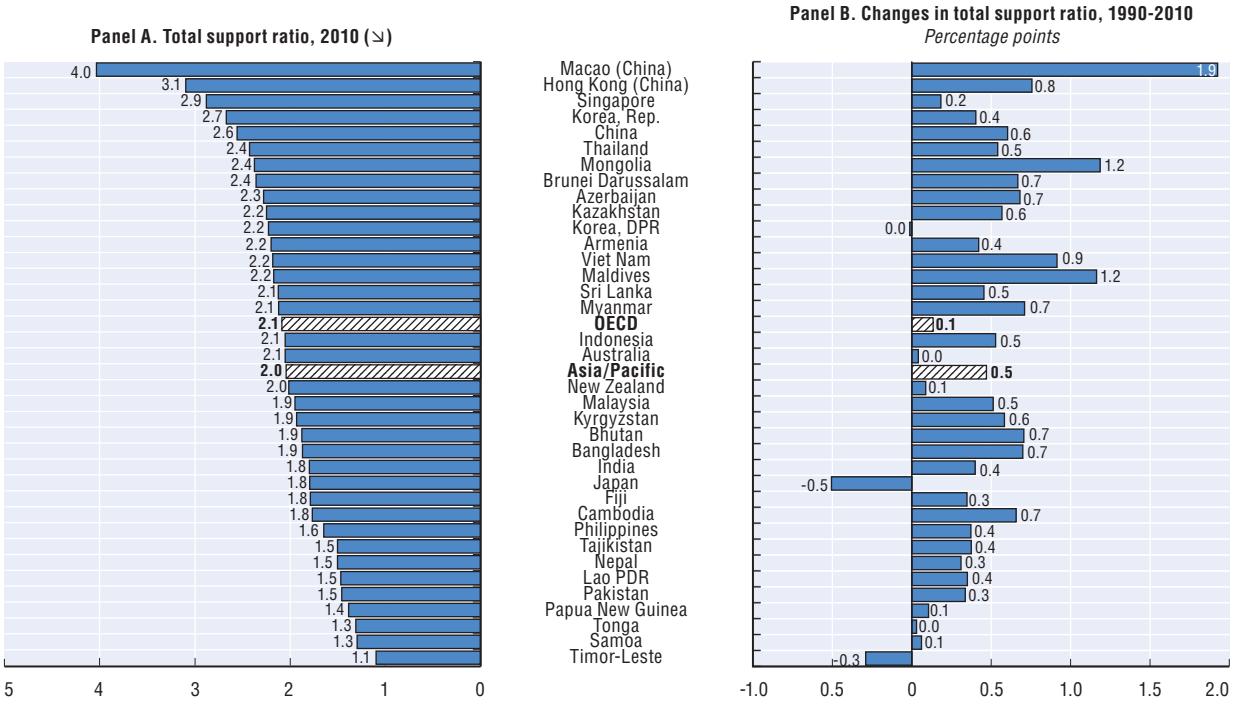
Declines in the dependency ratio were associated with higher growth rates in GDP per capita during the past 15 years. As shown in Figure GE5.3, countries with a higher annual average decrease in the dependency ratio grew faster. In other words, rapidly growing countries like China, Viet Nam, Mongolia and India may have benefitted from an increase in the working-age population, which boosted economic activity. However, given that the trend in the dependency ratio is predicted to reverse in years to come, the heavier burden of dependants is likely to affect economic prospects, especially in China and the Republic of Korea, where the dependency ratio is predicted to be multiplied by 1.6 and 2.3, respectively, between 2010 and 2050.

Definition and measurement

Support ratios measure the age structure of a population by calculating the ratio of the number of individuals who are likely to support themselves for their daily living to the number of those who are dependent on such support, *i.e.* the children and the elderly. The key indicator of the support ratio relates the combined number of individuals aged 15 to 64 to the population aged less than 15 years old and those aged 65 and over. The combined share of the population aged 15-64 as a percentage of the population aged less than 15 and more than 64 can be read as the ratio between the economically active population and the economically non-active population. All ratios are presented as the number of working age (15-64) people per one dependant person.

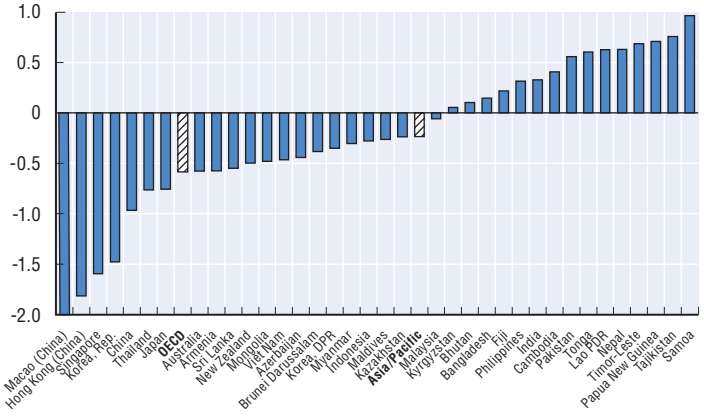
Data come from the United Nations' *World Population Prospects* online database (2009, *http://esa.un.org/unpp/index.asp?panel=2*). The projections for age-dependency ratios used in this section are based on the "medium variant" population projections.

GE5.1. **Support rate levels and trends**



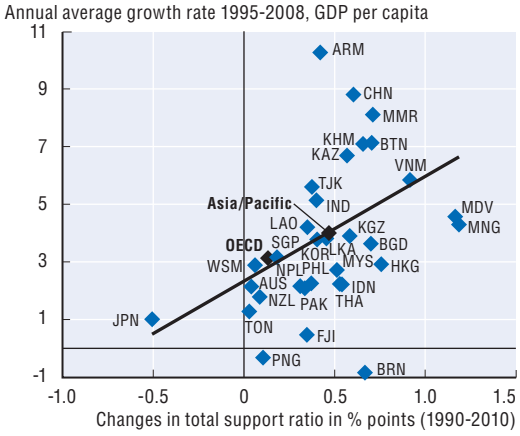
GE5.2. **Point change in support ratio, 2010-50**

Percentage points



GE5.3. **GDP growth and changes in total support ratio**

Annual average growth rate 1995-2008, GDP per capita



Note: The support ratio is defined as the ratio of the population aged 15-64 per one person of the population aged 0-14 or 65+.

Source: UN World Population Prospects, 2008 Revision.

StatLink http://dx.doi.org/10.1787/888932546243

Chapter 5

Self-sufficiency Indicators

SS1. Employment

Employment provides people with income with which to support themselves and their families. For many people, paid employment is also a source of meaning, social interactions and life satisfaction.

The highest employment rates in the Asia/Pacific region are found in Thailand and China, where more than seven in every ten adults are employed (Panel A, SS1.1). On the other hand, fewer than half the adult population are employed in Pakistan and Sri Lanka. OECD Asia/Pacific countries and economies have a wide range of employment rates, largely reflecting variations in female employment.

The employment rate consequences of the crisis of 2008 have been relatively muted in the Asia/Pacific region (Panel B, SS1.1). The larger falls in employment rates have been concentrated in the richer countries or economies of the region – Australia; the Republic of Korea, Hong Kong (China), Japan and New Zealand. In contrast, a number of poorer countries have managed to increase their employment rates significantly over the crisis period, particularly Mongolia, Indonesia and Viet Nam.

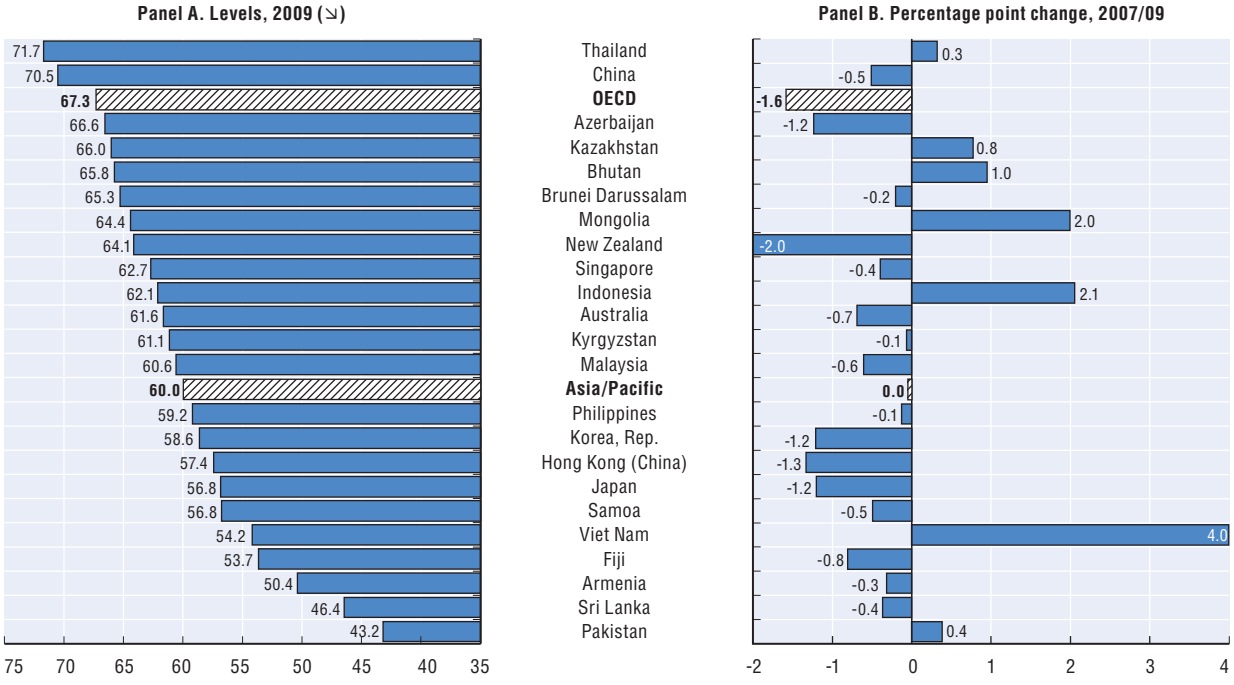
There are large differences between Asia/Pacific countries and economies in terms of labour force participation rates for men and women, which are a key driver of employment rate gaps (SS1.2). Low relative female employment contributes markedly to the observed variation in the total employment rate observed in Panel A of SS1.1. Gender gaps in labour force participation are notably small – less than 10 percentage points – in the former Soviet Republics and New Zealand and Australia. Male participation rates are much higher than female employment rates in Japan and the Republic of Korea. Especially large gender gaps in participation rates are found in countries with low aggregate employment rates like Pakistan and Sri Lanka.

Participation rates are also lower for younger people and older people than for people of prime working age (SS1.3). However, these age gaps differ greatly by country. There are large gaps between young workers and prime age worker participation in Azerbaijan, the Republic of Korea, Singapore and Japan. Participation rates of older people are very similar to prime age workers in Pakistan, the Philippines and Indonesia.

Definition and measurement

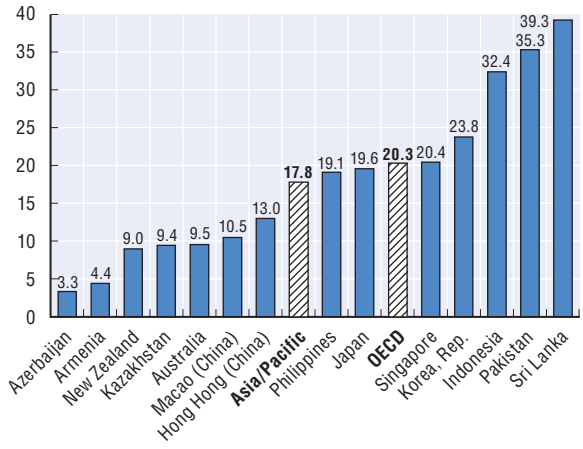
The employment rate is the ratio of employed people over age 15 to the total population over age 15. The data on the headline employment rate and the employment rate change come from *Key Indicators for Asia and the Pacific 2010*, Asian Development Bank (August) and were derived from the unemployment rate and labour force participation rate figures.

SS1.1. **Employment rates and recent changes**



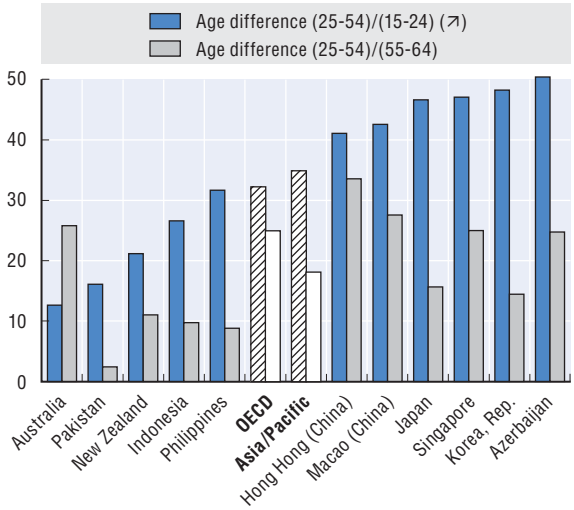
SS1.2. **Gender gap in labour force participation rate (men minus women)**

Percentage points



SS1.3. **Age gap in labour force participation rate**

Percentage points



Note: Data refer to the population aged 15 years and over.

Source: ADB, Asian Development Bank (*www.adb.org*); Key Indicators for Asia and the Pacific 2010, ILO LABORSTA online database, International Labour Organisation ILO, *OECD Labour Force Statistics Database*.

StatLink http://dx.doi.org/10.1787/888932546262

SS2. Unemployment

Unemployment reduces people's ability to support themselves and their families and makes them reliant on others, especially the state benefit system or others in the family. Unemployment also has substantial psychological costs for people, leading to lower life satisfaction in a permanent way.

Unemployment rates are relatively low amongst Asia/Pacific countries and economies (Panel A, SS2.1). Especially low unemployment rates are found on the Pacific Island of Samoa, at under 2%, while the highest rates are found on another Pacific Island, Fiji. Other countries with low unemployment rates include Thailand and Tajikistan. Higher unemployment rates can also be found in Kyrgyzstan, and, among the larger countries, in Indonesia and the Philippines.

As in the OECD, the trends following the 2008 economic crisis have pushed unemployment rates up in most countries (Panel B, SS2.1). As with employment changes in the opposite direction, the larger rises in unemployment rates have been concentrated in the richer countries or economies of the region – Australia, Hong Kong (China), Japan, New Zealand and Singapore. In contrast, Indonesia has reduced its unemployment rate over the crisis period, as have five other countries, but by much lesser amounts.

Women generally have higher unemployment rates than men (SS2.2). However, in many countries and economies, such as Malaysia, this gender gap is negligible or even reversed, as in Hong Kong (China). Generally speaking, the higher the unemployment rate, the larger the gender gap to the disadvantage of women. In Pakistan, the female unemployment rate is double that of men, while in the Maldives, female unemployment is more than three times the male rate.

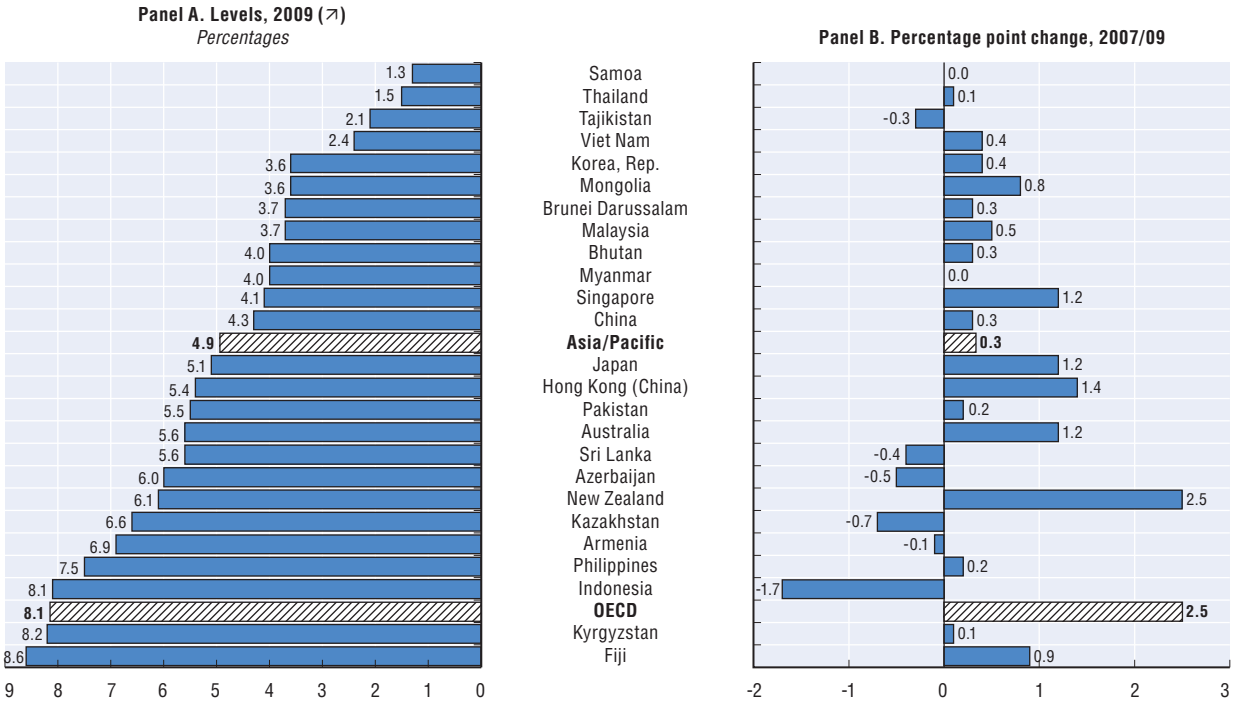
Youth unemployment rates are always higher than those for prime age workers, but sometimes older people have lower unemployment rates (SS2.3). In Sri Lanka, the Maldives and Indonesia, more than one in every four economically active young people is unemployed. In the cases of Sri Lanka and Indonesia, the gap in unemployment rates between young people and prime age people is large – about 15 percentage points. In some cases the unemployment rates of older people are lower than those of prime age workers. In fact, in Indonesia the unemployment rate of older workers is over 5 percentage points lower than that of prime age workers.

Definition and measurement

The unemployment rate is the ratio of people out of work and actively seeking it to the working-age population either in work or actively seeking it (15-64 years old).

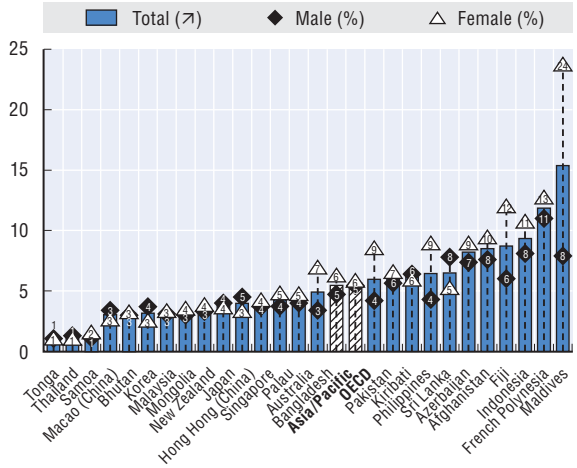
The data are gathered through labour force surveys of member countries. According to the standardised ILO definition used in these surveys, the unemployed are those who did not work for at least one hour in the reference week of the survey but who are currently available for work and who have taken specific steps to seek employment in the four weeks preceding the survey. Thus, for example, people who cannot work because of physical impairment, or who are not actively seeking a job because they have little hope of finding work, are not considered as unemployed.

SS2.1. **Unemployment levels and trends**



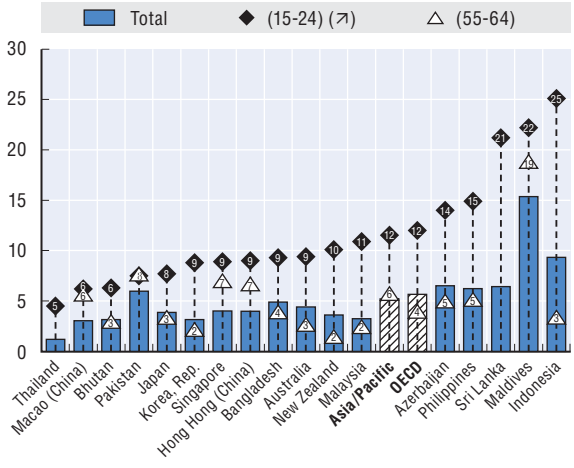
SS2.2. **Unemployment rates by gender**

Percentages



SS2.3. **Unemployment rates by age**

Percentages



Note: Data refer to the population aged 15 years and over.

Source: ADB, Asian Development Bank (*www.adb.org*); Key Indicators for Asia and the Pacific 2010, International Labour Organisation ILO LABORSTA online database, *OECD Labour Force Statistics Database*.

StatLink http://dx.doi.org/10.1787/888932546281

SS3. Education

The level of education of the population gives an indication of its stock of human capital. A higher stock of human capital means higher labour productivity and hence higher income-generating capacity. Better education is also associated with better health of both adults and children. The most readily comparable measure available across the wide range of countries covered is the total years of education of the working-age population.

New Zealanders have three times the number of years of schooling of Nepalese (Panel A, SS3.1). Other OECD Asia/Pacific countries and economies have similarly high levels of schooling, well in excess of ten years. India, the Lao People's Democratic Republic, Papua New Guinea and Myanmar all have around five years of schooling or less. Although Tonga and Fiji are relatively low GDP countries (GE1), they stand out for their comparatively high levels of human capital.

There has been a tendency in the last 30 years across all Asia/Pacific countries and economies for average years of schooling to rise (Panel B, SS3.1). The average rise has been well over two years per person across the region. These rises have been less than one year in New Zealand, Australia and Cambodia, but four years in Fiji and Malaysia.

As with GDP per capita (GE1)**, there is evidence of a convergence in years of education across countries** (SS3.2). Countries with low years of schooling in 1980, such as Pakistan and India, have tended to experience more rapid growth in years of education than countries that had high years of schooling in 1980, like New Zealand and Australia. It is likely that convergence in human capital levels is one important – but probably not the only – factor behind the convergence in per capita GDP observed above.

Women tend to have fewer years of education than the population as a whole (SS3.3). There has been considerable catch-up in schooling outcomes by gender. However, the stock of human capital represents investments over a period of half a century, and thus includes periods when inequality was much greater than today. The Philippines is an exception, as women have more education than the population average, while the years are equal in New Zealand. Gender differences are rather more pronounced to the disadvantage of women in India, Pakistan and China.

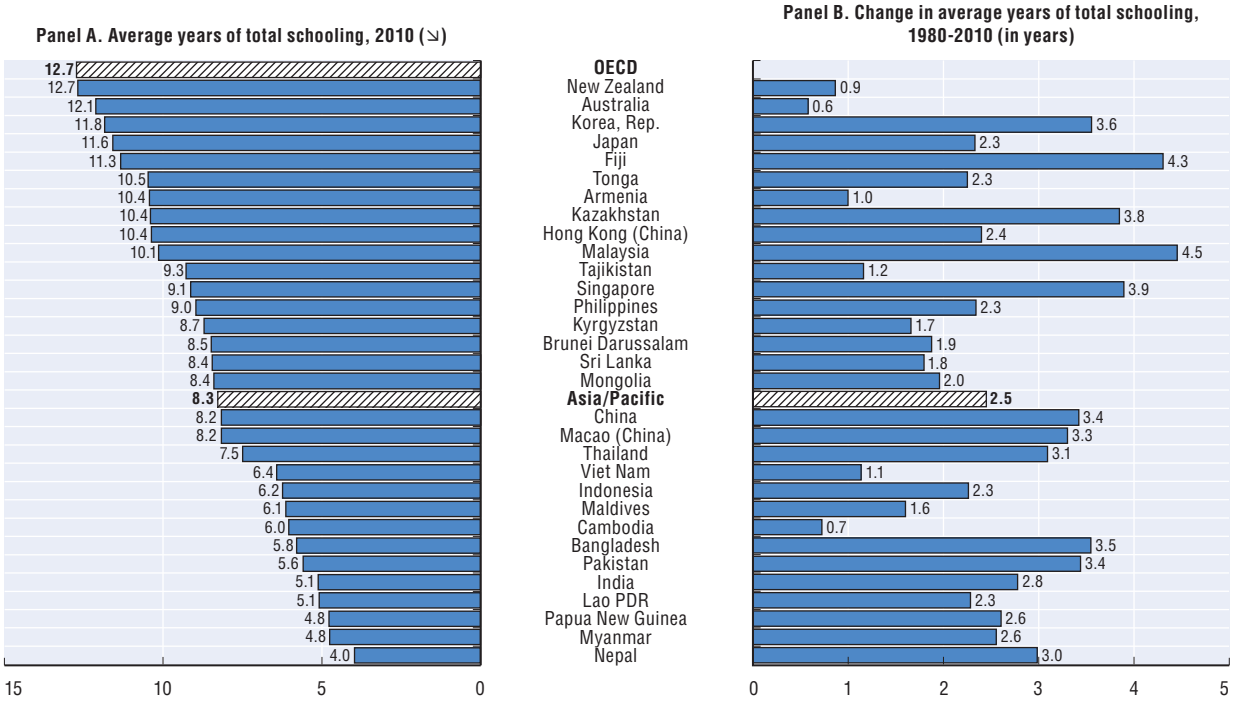
Definition and measurement

Given the wide variety of countries at very different stages of development that are considered here, the core measure of education likely to have the greatest comparability is years of education. The data on years of education, and years of women's education, were taken from the Barro-Lee data set (Barro and Lee, 2010). The data set did not directly include years of education for men.

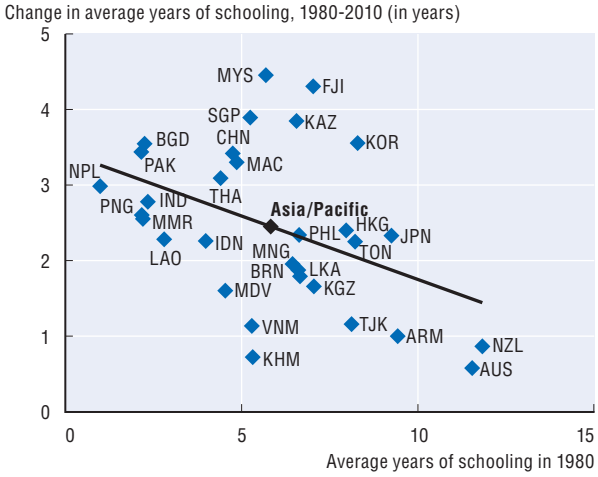
Further reading

Barro, R. and J.W. Lee (2010), "A New Data Set of Educational Attainment in the World: 1950-2010", *NBER Working Paper*, No. 15902, Cambridge, MA, *www.nber.org/papers/w15902*.

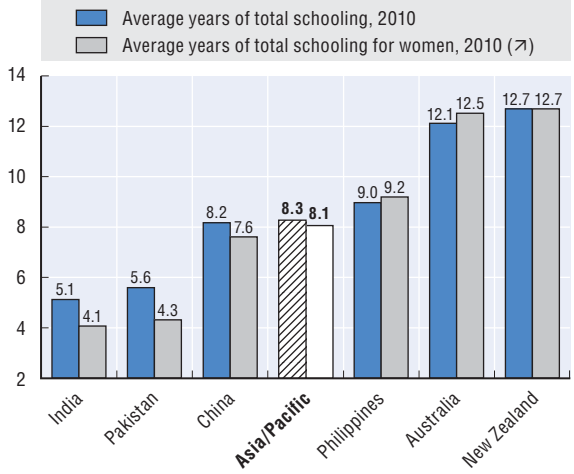
SS3.1. **Education levels and changes**



SS3.2. **Convergence in years of schooling**



SS3.3. **Gender difference in years of schooling**



Note: SS3.1: Data for the OECD refers to the number of years at which over 90% of the population are enrolled. Change in average years of total schooling 1980-2010 (years) is not available for the OECD.

Source: Barro and Lee (2010); OECD (2010), *Education at a Glance: OECD Indicators.*

StatLink http://dx.doi.org/10.1787/888932546300

SS4. Early childhood education

Public investment in early childhood education indicates the commitment within a society to equip its children with the necessary skills to support their future lives. Early childhood education also allows women to balance motherhood with paid employment, should they so chose, and thus gives an indication of women's self-sufficiency.

The percentage of pre-school children attending an early education programme differs significantly across countries (Panel A, SS4.1). From the available data, the lowest attendance is observed in the Lao People's Democratic Republic (total 3%) and the highest in New Zealand (95%). In general, the higher-income countries of the region have a higher attendance of children in ECE programmes. However, Maldives, Thailand and Viet Nam, all relatively low-income countries, are not far behind Australia, a higher-income country in terms of participation.

Attendance in early childhood education has been rising in most countries in the recent past (Panel B, SS4.1). The rises were largest in India, Nepal and Kazakhstan. Attendance rates actually fell in Bangladesh and Tonga.

Gender differences in pre-school attendance in most countries are insignificant (SS4.2). For the majority of countries, there are very minor differences in attendance by gender, and when such differences do exist, there is a higher attendance of girls. The exceptions are Maldives, Azerbaijan, Tajikistan and the Lao People's Democratic Republic with a slightly higher attendance of boys. A more noticeable difference is in Kazakhstan where the attendance difference is 3.7% in favour of boys. Attendance rates between urban and rural areas also differ. Except for Bangladesh, more children attend early childhood education programmes in urban areas.

Higher rates of early childhood education and care are associated with lower rates of infant mortality (SS4.2). It is likely that this relationship is observed because richer countries invest more publicly and privately in young children, and this investment shows up both in lower infant mortality and in higher early childhood education participation.

Definition and measurement

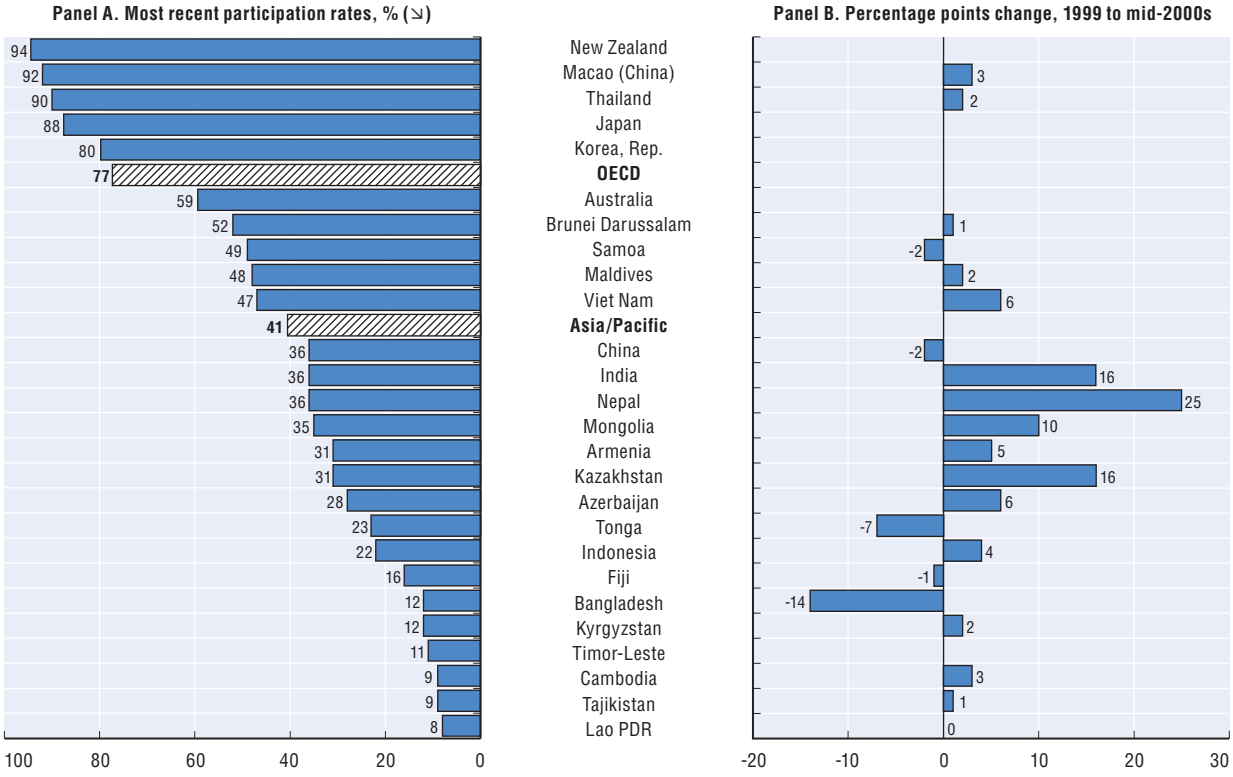
The data on early childhood education (ECE) participation come from UNESCO (2006) and the *OECD Family Database* (for the four OECD member countries). There are a number of caveats attached to the data for the non-OECD countries of the region, for which the UNESCO publication should be consulted. The data come from a variety of sources for a variety of years, in many cases cover slightly different age groups, and consequently are only broadly comparable between countries.

Further reading

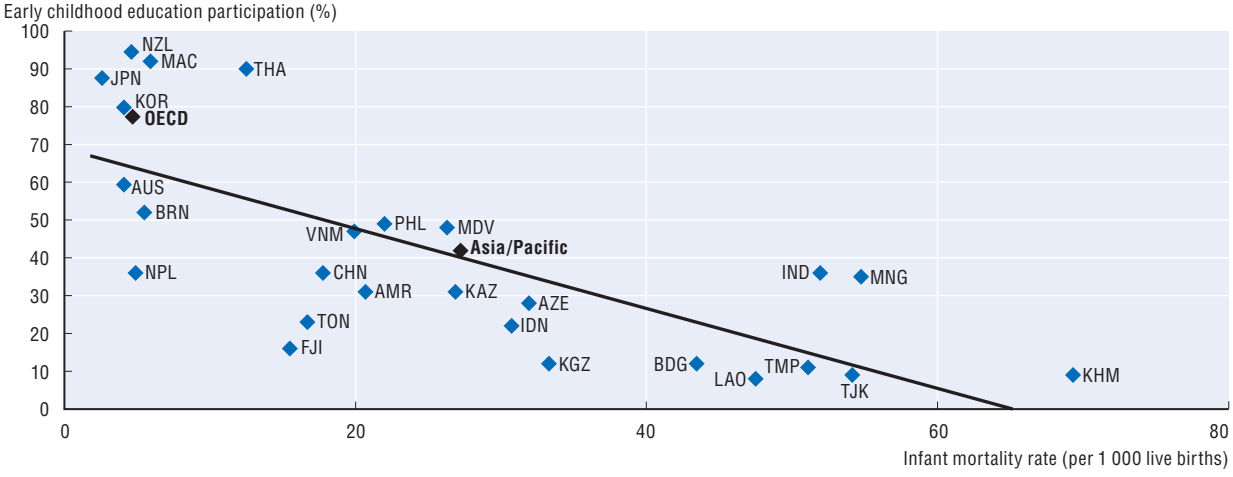
UNESCO (2006), *Strong Foundations*, UNESCO, Paris.

SS4.1. **Early childhood education levels and trends**

Early childhood education participation between 3 and 6 years, mid-2000s



SS4.2. **Early childhood education participation and infant mortality**



Source: UNESCO (2006), *Strong Foundations;OECD Family Database; OECD Education Database.*

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SS5. Education spending

Education spending represents society's response to providing its children with the social and economic skills needed to be self-sufficient in life. Countries spend different amounts on education. They also vary the resources committed in different ways across the child's educational life cycle, a phenomenon that is not examined here.

Public education spending as a share of GDP differs greatly across the Asia/Pacific region (Panel A, SS5.1). The Maldives, Timor and Kyrgyzstan spend a large amount of their GDP on public education, while Azerbaijan, Cambodia and Myanmar spend less than one-quarter of this amount.

Public education spending as a share of GDP in the region can change considerably over a relatively short period. There is no dominant overall pattern across the region of increases or decreases in the GDP share spent on education. Larges rises are observed in Kyrgyzstan, of 3 percentage points of GDP, and large falls in adjacent Azerbaijan, of a similar amount.

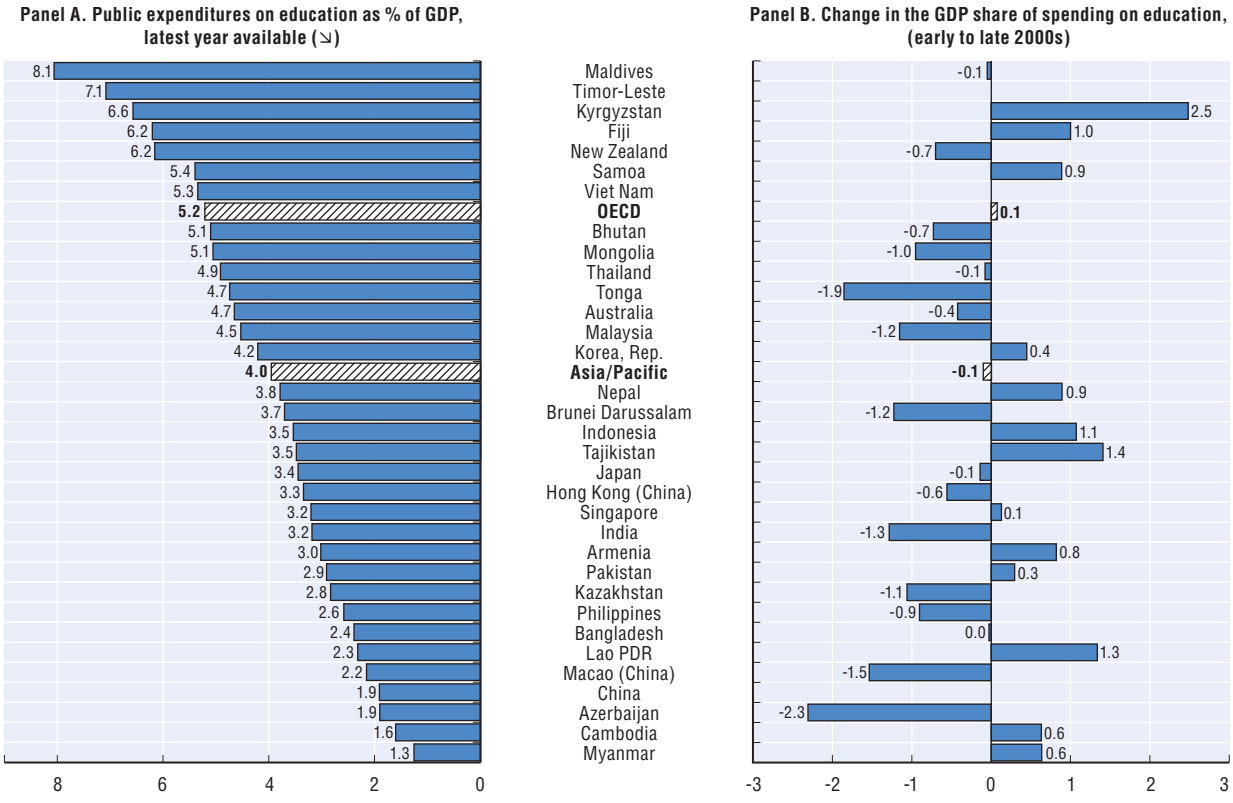
There is no link between GDP per capita and public expenditure on education (SS5.2). Richer countries do not tend to spend higher shares on education. While some poorer countries seem to have chosen a strategy of higher public spending on education, like the Maldives, other poorer countries, like Myanmar, spend almost nothing on public education. These are very different development strategies.

There is only a weak positive relationship between public spending on education and average years of schooling (SS5.3). Cambodia and the Maldives have very similar average years of schooling, but the Maldives' share of GDP invested in education is about four times larger. The lack of a stronger relationship could be because education spending is changing the stock of average years of education at the margin.

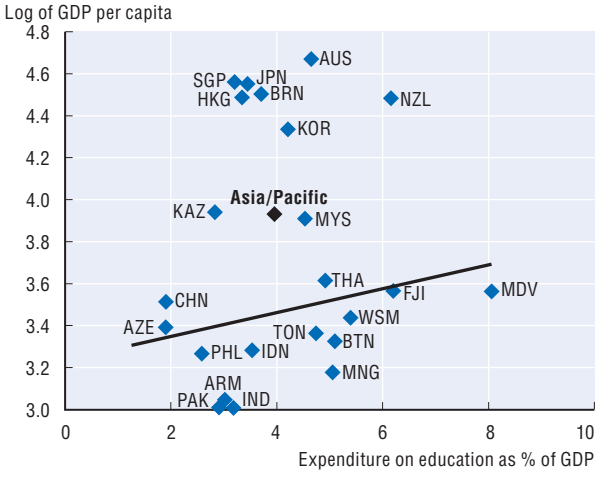
Definition and measurement

Data on public education spending as a percentage of GDP was extracted from UNESCO Institute for Statistics, *http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx*.

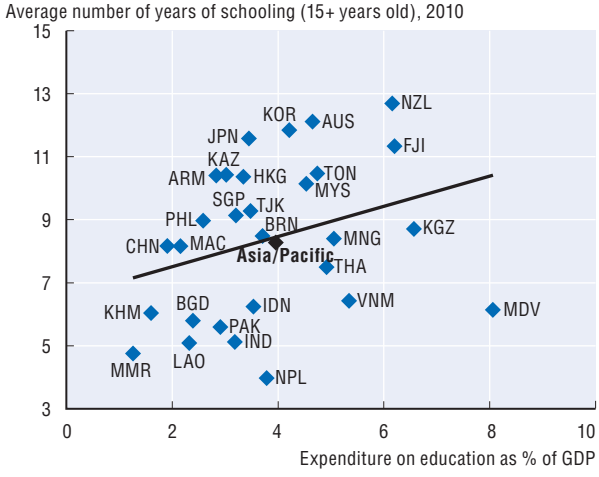
SS5.1. **Education spending levels and trends**



SS5.2. **Rich countries do not spend relatively more on education**



SS5.3. **Spending on education and average years of schooling correlate only weakly**



Source: UNESCO Institute for Statistics, *http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx*; OECD (2010), *Education at a Glance*.

StatLink http://dx.doi.org/10.1787/888932546338

Chapter 6

Equity Indicators

EQ1. Poverty

Poverty measures the relative numbers of people at the bottom end of the income distribution. The equity concerns of a society tend towards the disadvantaged. The focus here is on absolute poverty, using a common poverty line across countries.

Almost half of the population living in Asia/Pacific countries and economies is poor, and one-fifth is extremely poor (Panel A, EQ1.1). More than 80% of the region's poor live in Bangladesh, India and China. The poorest country is Bangladesh, where more than 80% of the population live with less than USD 2 a day. Poverty levels are the lowest in Azerbaijan and Kazakhstan (the four OECD Asia/Pacific countries and economies are not included here, as their rate is zero. Singapore, Macao (China) and Hong Kong (China) economies are excluded for the same reason).

Despite important disparities in the pace of poverty reduction, poverty rates decreased in all the Asia/Pacific countries and economies over the last decade (Panel B, EQ1.1). Kyrgyzstan, the Lao People's Democratic Republic and Malaysia witnessed the slowest poverty decline. Declines were highest for Azerbaijan, Viet Nam, Mongolia and China.

Absolute poverty is a measure of inability to satisfy subsistence needs, including the need for nourishment. However, the share of undernourishment is not strongly correlated with the share of the population living under the USD 2 poverty line (EQ1.2). Thus poverty is not synonymous with hunger. This implies that there may be space for social policies focused on food security. Some countries, such as Azerbaijan, Thailand, Armenia and Mongolia, have comparatively low levels of poverty but worryingly high levels of undernourishment – even higher than the poverty rate. This means that some people who are not considered poor are undernourished.

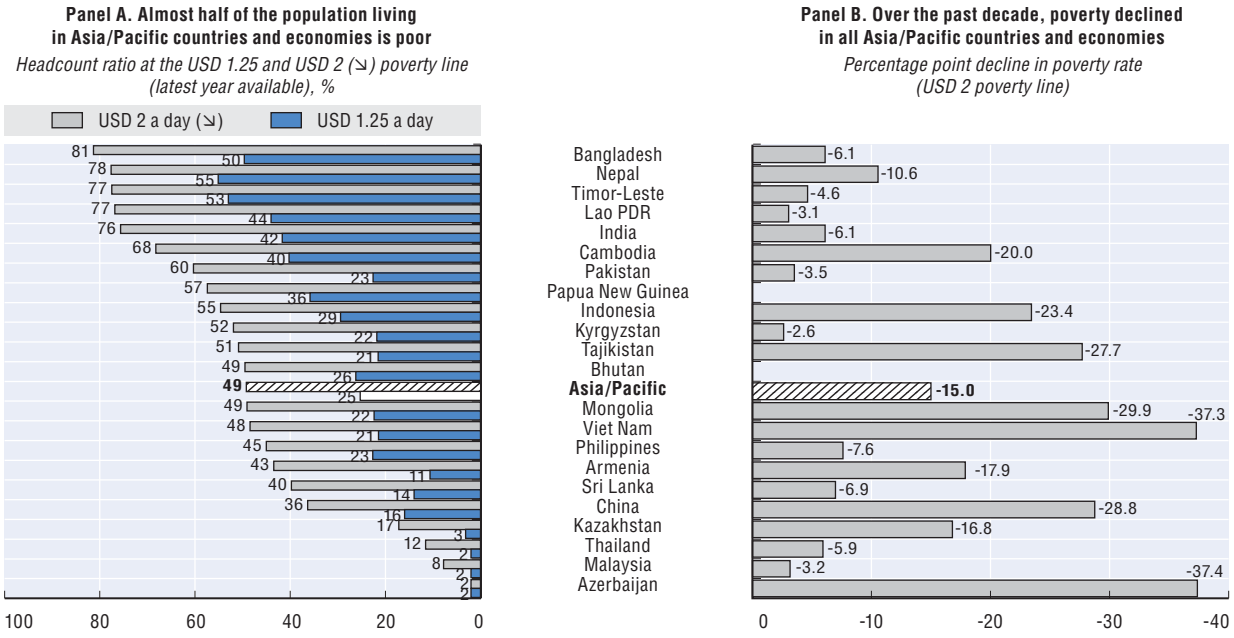
Declining poverty was more rapid in countries with higher GDP growth (EQ1.3). The pace of both growth and poverty reduction was fastest in Azerbaijan, where GDP per capita multiplied by four between 1995 and 2008 and the poverty rates declined by more than 35 percentage points. However, the imperfect correlation between growth and poverty reduction underlines the variety of poverty elasticities to growth. Thus in Viet Nam the poverty-reducing effect of growth was higher than in China.

Definition and measurement

Poverty is commonly measured by using income or consumption levels. A person is considered poor if his or her consumption or income level falls below a predetermined poverty line, which corresponds to a minimum level necessary to meet basic needs. At the international level, two reference poverty lines are set at USD 1.25 and USD 2 per person per day (2005 purchasing power parity). The USD 1.25 poverty line corresponds to the mean of national poverty lines for the 10-20 poorest countries of the world, while the USD 2 line is the median poverty line found among developing countries as a whole. People living with less than USD 1.25 a day are said to be in extreme, or absolute, poverty. Data on undernourishment is also shown here. Undernourishment refers to the condition where people's dietary energy consumption is continuously below the minimum dietary energy requirement for maintaining a healthy life and carrying out light physical activity with an acceptable minimum body-weight for an attained height.

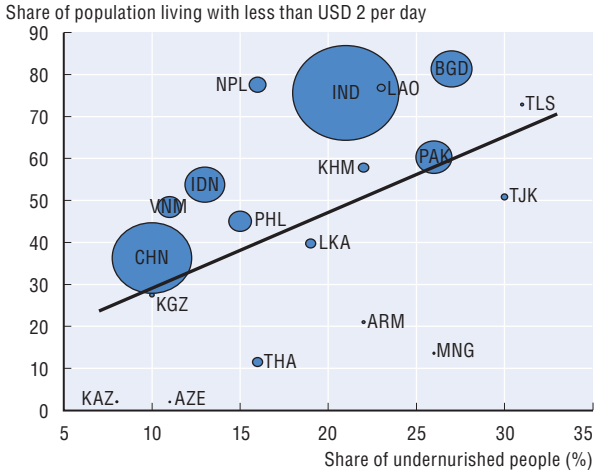
The data presented here are the percentage of people living with a level of income or consumption that falls under the poverty lines. Data on the population share living below national and/or universal poverty lines are available only for the least developed economies. Data is from the World Bank's *World Development Indicators* online database (2010, *http://data.worldbank.org/indicator*) and from the *Key Indicators for Asia and the Pacific 2010* of the Asian Development Bank. Data are based on household surveys or obtained from government statistical agencies and World Bank country departments. Given that poverty is measured based on either income or expenditure, headcount ratios are not strictly comparable across countries. Data on undernourishment is from the Food and Agriculture Organization of the United Nations (*www.fao.org/economic/ess/food-security-statistics/en/*).

EQ1.1. **Poverty rates and trends**



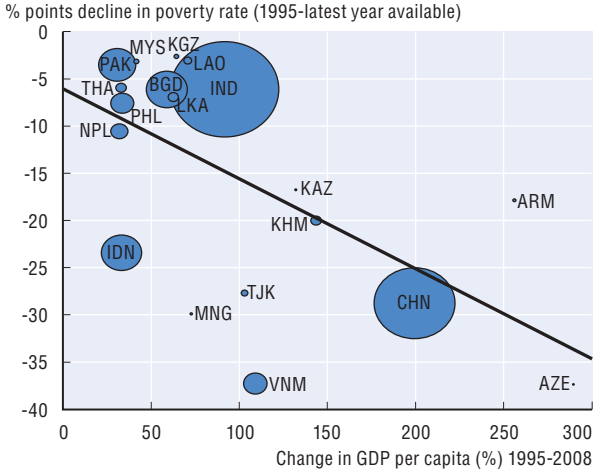
EQ1.2. **In some countries, the prevalence of undernourishment persists despite low levels of poverty**

The size of the bubble is proportional to the number of poor people



EQ1.3. **Higher growth rates are linked with faster poverty reduction**

The size of the bubble is proportional to the number of poor people



Note: EQ1.1, Panel A: Timor-Leste: 2001 data; the Lao People's Democratic Republic and Sri Lanka: 2002 data; Armenia, Bhutan, Kazakhstan and Uzbekistan: 2003 data; Cambodia, Kyrgyzstan, Malaysia, Nepal, Tajikistan and Thailand: 2004 data; Azerbaijan, Bangladesh, China, India, Mongolia and Pakistan: 2005 data; and Philippines and Viet Nam: 2006 data.

Definition: Population below USD 1.25 a day is the percentage of the population living on less than USD 1.25 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions. Data showing as 2.0 signifies a poverty rate of less than 2.0%.

Source: EQ1.1: World Bank (2009), World Development Indicators online database, *http://ddp-ext.worldbank.org/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=6*. World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. Data for high-income economies are from the Luxembourg Income Study Database. EQ1.2 and EQ1.3: Food and Agriculture Organization (FAO), *www.fao.org/economic/ess/food-security-statistics/en/*.

StatLink http://dx.doi.org/10.1787/888932546357

EQ2. Income inequality

Income inequality indicates how material resources are distributed across society. Some consider high levels of income inequality to be morally undesirable. Others believe that income inequality is bad because it causes conflict, limits co-operation or creates psychological and ultimately physical stresses. Often the policy concern is more for the direction of changes in inequality, rather than for its level.

Income inequality is high in Asia/Pacific countries and economies compared to the OECD (Panel A, EQ2.1). The Gini coefficient is the most unequal in Indonesia, India and Hong Kong (China). In India the Gini is as high as 54, which is 50% higher than the OECD average. The Gini is most equal in the countries of the former Soviet Union – Azerbaijan, Armenia and Kazakhstan. Expenditure-based inequality measures are much lower than income-based measures, as expected. Inter-decile ratios measure income differences as a ratio between the poorest 10% and the richest 10% of the population. In countries and economies like Hong Kong (China), Singapore, Papua New Guinea or Bhutan, society tends to be extremely polarised between rich and poor. In countries with the fewest inequalities, such as Armenia, Kazakhstan, Bangladesh, Pakistan, Timor-Leste and the Lao People's Democratic Republic, the richest 10% have around six times higher income than the poorest 10%. In Azerbaijan, they gain only three times more than the poorest 10%.

Over the last decade, income inequality increased in most countries (Panel B, EQ2.1). Inequality increased in some of the poorest countries in the region – like Nepal, Cambodia and Sri Lanka – as well as two rich economies – Singapore and Hong Kong (China). Big declines in inequality took place in the three former Soviet Republics of Kyrgyzstan, Azerbaijan and Armenia.

There is no clear country-correlation between economic growth and changes in inequalities (EQ2.2). However, when one allows for population sizes and discards some small country outliers, there is some suggestion of a positive relationship between GDP growth and rises in inequality.

Definition and measurement

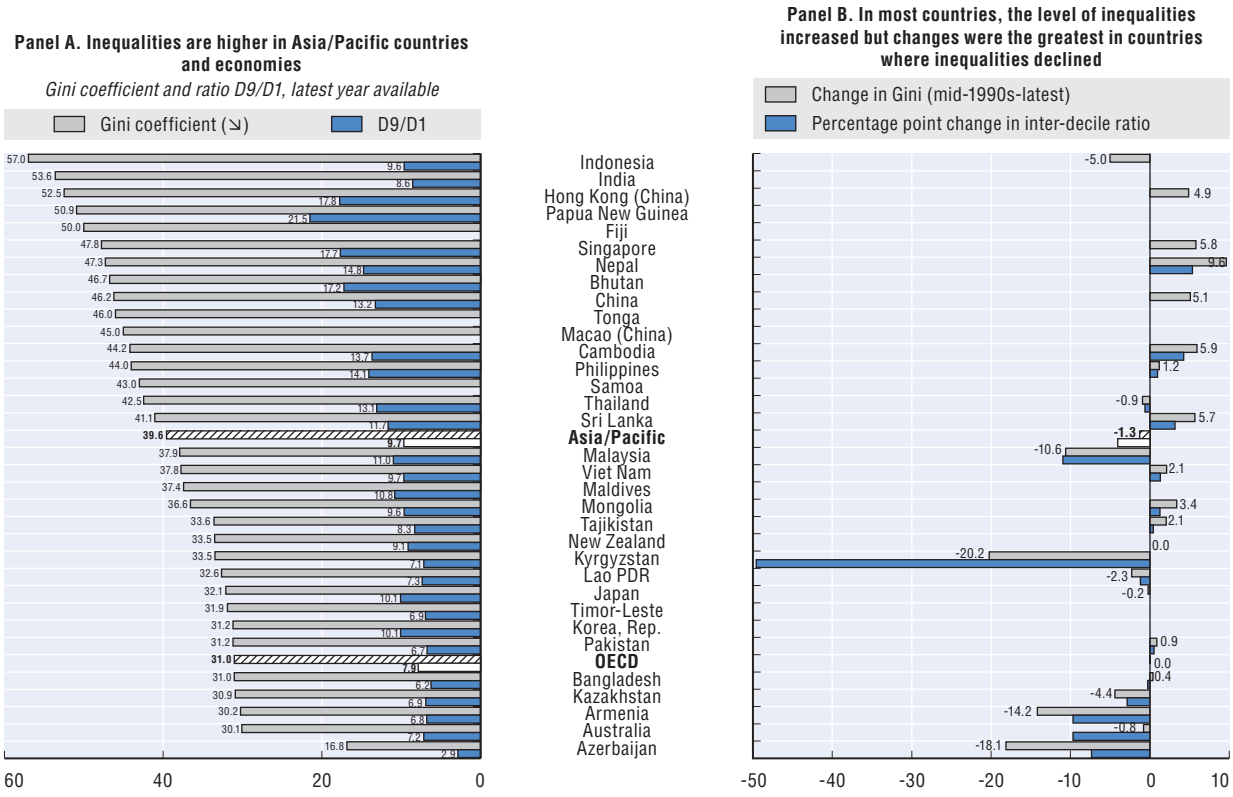
OECD measures of inequality are based on income. For many developing countries, where most people are self-employed in agriculture or casual labourers, income data is often not relevant or non-existent. For most countries, inequality measures are expenditure-based. Thus country comparisons should be made with caution, as expenditure-based measures typically show lower inequality than do income-based measures.

The main distributive indicator used is the Gini coefficient. Values of the Gini coefficient range between 0 in the case of "perfect equality" (each person gets the same income) and 1 in the case of "perfect inequality" (all income goes to the share of the population with the highest income). Also used is the inter-decile ratio, *i.e.* the ratio between the upper limit of the 9th decile and that of the 1st decile. Data on inter-decile income/expenditure ratios comes from the World Bank Development Research Group (*http://data.worldbank.org/indicator*). Gini coefficients for OECD countries come from OECD (2008). Data for India, China, Hong Kong (China), Macao (China), Fiji, Singapore and Indonesia were derived from government reports or published studies. For other countries, data comes from the 2010 Asian Development Bank's report *Key Indicators for Asia and the Pacific 2010*. Data comparability across countries may be affected by the variation in sample sizes, the choice of an income/expenditure measure, the choice of income pre/post transfers and taxes, inequalities among individuals/households, and the choice of the equivalence scale used to attribute each person of a household an income when the measure of inequalities is among individuals.

Further reading

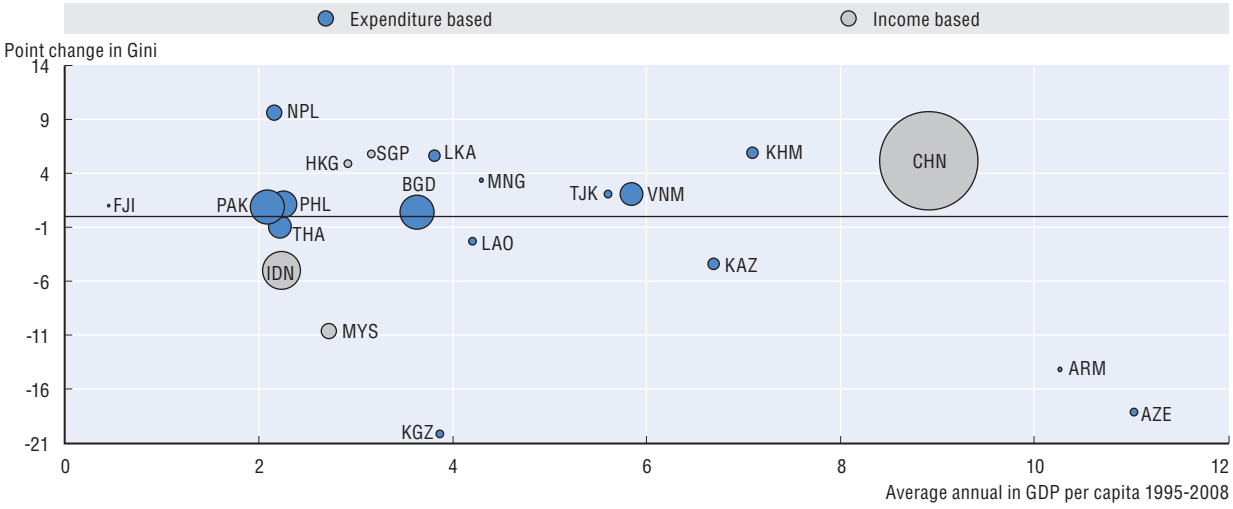
OECD (2008), *Growing Unequal? Income Distribution and Poverty in OECD Countries*, OECD Publishing, Paris, *www.oecd.org/els/social/inequality*.

EQ2.1. **Inequality levels and trends**



EQ2.2. **Growth and inequality are unrelated**

The size of the bubble is proportional to the population



Source: OECD (2008), *Growing Unequal? – Income Distribution and Poverty in OECD Countries* and OECD (2011), The Causes of Growing Inequalities; World Bank Development indicators, *http://data.worldbank.org/*.

StatLink http://dx.doi.org/10.1787/888932546376

EQ3. Gender ratio

Missing females are measured by the shortfall in the number of females relative to the number that would be expected from normal birth ratios. The gender shortfall is believed to take place through *sex-selective abortion, female infanticide* or the unequal allocation of health care and food towards males. The natural male-to-female ratio at birth is between 105 and 107 males per 100 females. This ratio, however, tends to even out and then skew in favour of females as population cohorts age due to the greater biological resilience of females.

The most acute demographic imbalance amongst the youngest age cohort of 0-4 years is in China (Panel A, EQ3.1). China has 122 boys aged 0-4 for every 100 girls. High ratios of young boys to girls are also observed in Armenia and Azerbaijan. Ratios in excess of the upper range of birth norms are also observed in the Republic of Korea, Hong Kong (China) and India.

The last 20 years have witnessed a general tendency across virtually all countries for the sex ratio to rise (Panel B, EQ3.1). This rise may be due to the fact that large cross-country reductions in infant mortality over that period make it more likely that more biologically fragile male children survive. The chart also shows that the unequal sex ratios in China, Armenia and Azerbaijan have arisen within the last generation.

There is a sharp fall in the sex ratio in China in the early 1950s, followed by a gradual drift upwards until the mid-1980s (EQ3.2). From the late 1980s there is an extremely rapid rise in missing females for the youngest age cohort. The relationship seems to have peaked and may again be in decline.

The picture through time in the Republic of Korea follows a pattern that is broadly similar to China but less accentuated until the sharp rise in the late 1980s (EQ3.3). From 1990 to 2000 the sex ratio falls as rapidly as it has risen. However, from that point, the ratio appears to have started to drift up again.

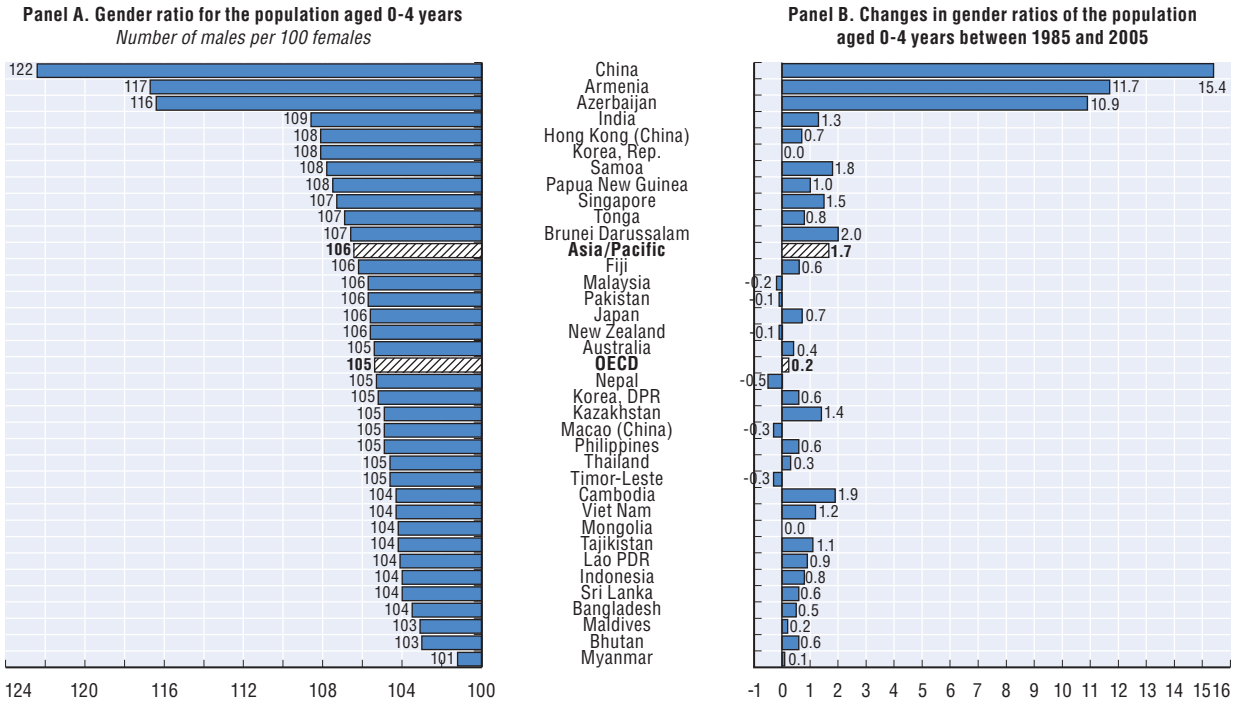
Definition and measurement

Data from the United Nations Department of Economic and Social Affairs was utilised for the population demography values and to compute the sex ratios. The population demography data is presented annually with the number of females and males broken down into 5-year age groups up to 80+. Since the age group "80+" is already a good representation of the older cohort, data beyond this benchmark was not disaggregated further. The sex ratio is computed mainly for the 0-4 age group since that presents a better reflection of the gender bias. Even though typically more boys are born than girls, the boys have a higher childhood mortality rate, which virtually cancels out the numerical advantage at birth by the age of five (Hudson and Boer, 2004). The sex ratios calculated on an aggregate level present an overall picture of unbalanced gender proportions.

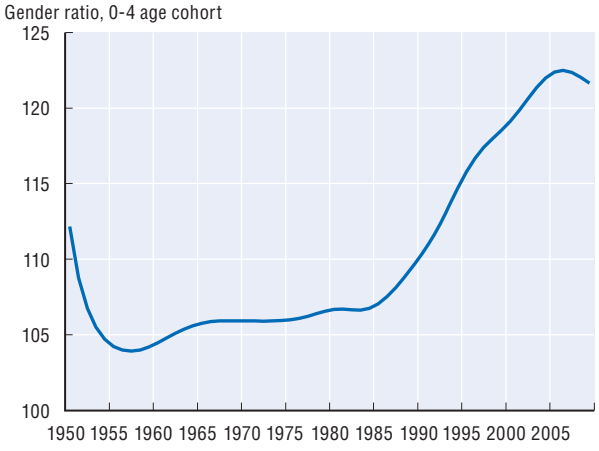
Further reading

Hudson, V. and A.M. Den Boer (2004), *Bare Branches: The Security Implications of Asia's Surplus Male Population*, MIT Press, Cambridge, MA.

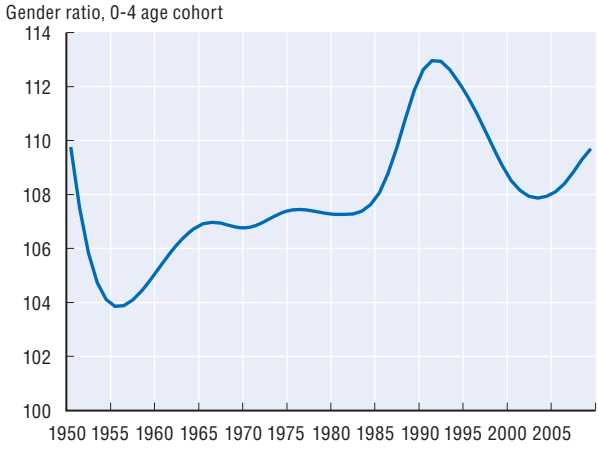
EQ3.1. **Gender ratios and changes**



EQ3.2. **Gender ratio of the youngest age cohort in China, 1950-2009**



EQ3.3. **Gender ratio of the youngest age cohort in the Republic of Korea, 1950-2009**



Source: United Nations, Department of Economic and Social Affairs, OECD Population Statistics.

StatLink http://dx.doi.org/10.1787/888932546395

EQ4. Pensions

Old-age pensions are a means through which societies materially provide for older people during their retirement. They are a partial substitute for individual and family provision in old age. There are two important dimensions of pensions here. The first is the proportion of the population who are covered by a pension scheme. The second is the extent to which the pension paid replaces previous earnings.

Pension coverage varies from 90% of the labour force in Japan, Australia and New Zealand to well under 10% in Pakistan, Nepal and Bangladesh (Panel A, EQ4.1). The latter are all countries that typically rely heavily on family provision for the material needs of older people. Pension provision is always significantly lower for the working-age population than for the labour force. Pension coverage in the Republic of Korea is only about one in every two people active in the labour market, much lower than its fellow OECD member countries. This places considerable stress on those, especially women, who find themselves working, providing for elderly relatives and under pressure also to have children. China, which is rapidly ageing, has very low pension coverage and will therefore rely heavily on family provision for older people in the coming years.

There is much less variability in replacement rates than in pension coverage (Panel B, EQ4.1). Typically replacement rates are higher for lower earners in most countries, which will cause reductions in inequality amongst older people. The exceptions – where earnings inequality is simply replicated in pension inequality – include Singapore (where replacement rates are very low, only about 10% of earnings), Brunei, Sri Lanka, Thailand and Viet Nam. Lastly, China, Viet Nam and Pakistan noticeably combine very low pension coverage with relatively high replacement rates.

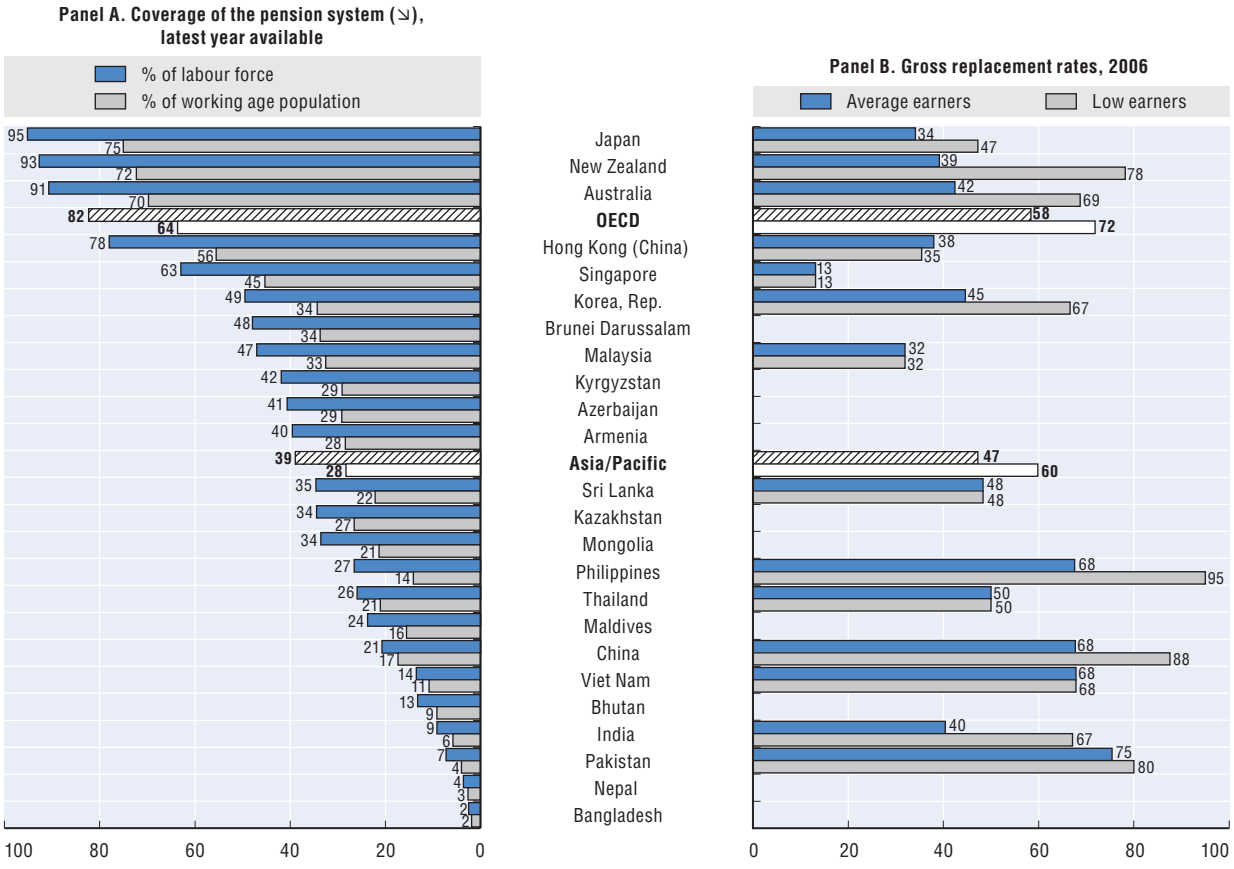
Countries where more adult males live with their parents have lower pension coverage (EQ4.2). If adult males living with their parents can be taken as an indicator of inter-generational adult family bonds, it would seem that family provision of material support for the older generation may well be greater in the countries that have lower coverage.

Countries with a higher proportion of people living on under USD 2 per day have lower pension coverage (EQ4.3). It is likely that countries with high amounts of absolute poverty have low coverage for a number of reasons, including cost and low amounts of paid employment and hence of marketisation of income available to be taxed for pension purposes. Additionally, it may be that low pension coverage causes high old-age poverty rates.

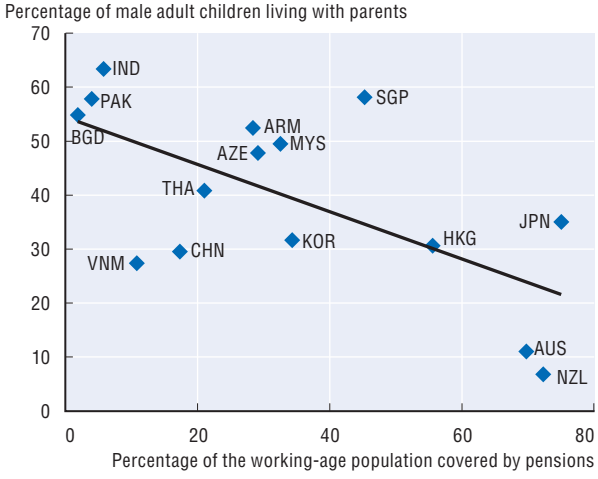
Definition and measurement

Data on pension coverage is sourced from the World Bank Database. Replacement rates come from OECD *Pensions at a Glance Asia/Pacific* 2009. Data on adult males living with parents is described in GE3 and poverty data in EQ1.

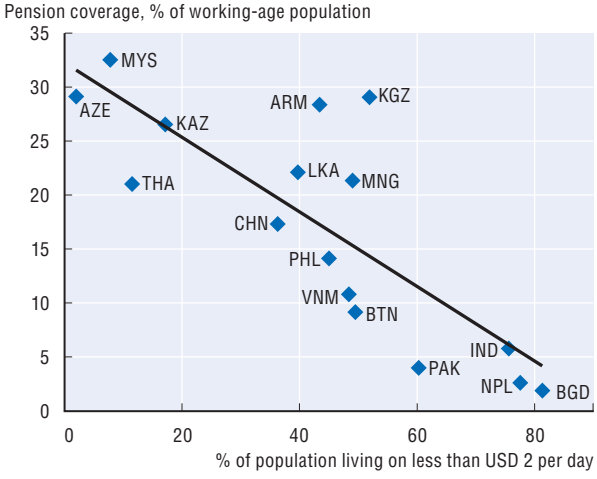
EQ4.1. **Pension coverage and replacement of earnings**



EQ4.2. **Lower pensions coverage associated with more adult males living with parents**



EQ4.3. **Poorer countries have lower pension coverage**



Source: Pension coverage from the World Bank Database. Replacement rates come from OECD *Pensions at a Glance Asia/Pacific 2009*.

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EQ5. Social spending

Public social spending measures the amount of resources committed by the government in the areas of pensions, benefits (social support) and health. Much of the traditional argument for social spending is to prevent disadvantage and thus enhance equity

The ratio of social spending to GDP varies significantly across Asian countries (EQ5.1). Average social spending in the Asia/Pacific region is one-quarter of the average across the OECD as a whole. All four Asia/Pacific OECD countries fell below average OECD social spending. Social spending in Japan, New Zealand and Australia, which have the highest social spending shares, is each around 18% of GDP. On the other hand, nine Asia/Pacific countries and economies spend less than 2% of GDP on social spending, with Papua New Guinea the lowest, at only 3/10th of a percentage point.

The distribution of social spending across various sorts of programmes also differs markedly by country (EQ3.2). The biggest spending item in Japan, China and Malaysia is social insurance, while the biggest items in Bangladesh and Cambodia are micro- and area-based spending policies. In many Asia/Pacific countries and economies, social insurance focuses on the public and formal sectors, which inevitably excludes the great majority of the population, as well as most of the poor.

Countries with higher social spending tend to be those with lower amounts of absolute poverty (EQ5.2). It is likely that countries with high amounts of absolute poverty have low social spending because of cost, and low amounts of paid employment and hence of marketisation of income available to be taxed for social purposes. Additionally, low social spending may also contribute to higher poverty rates.

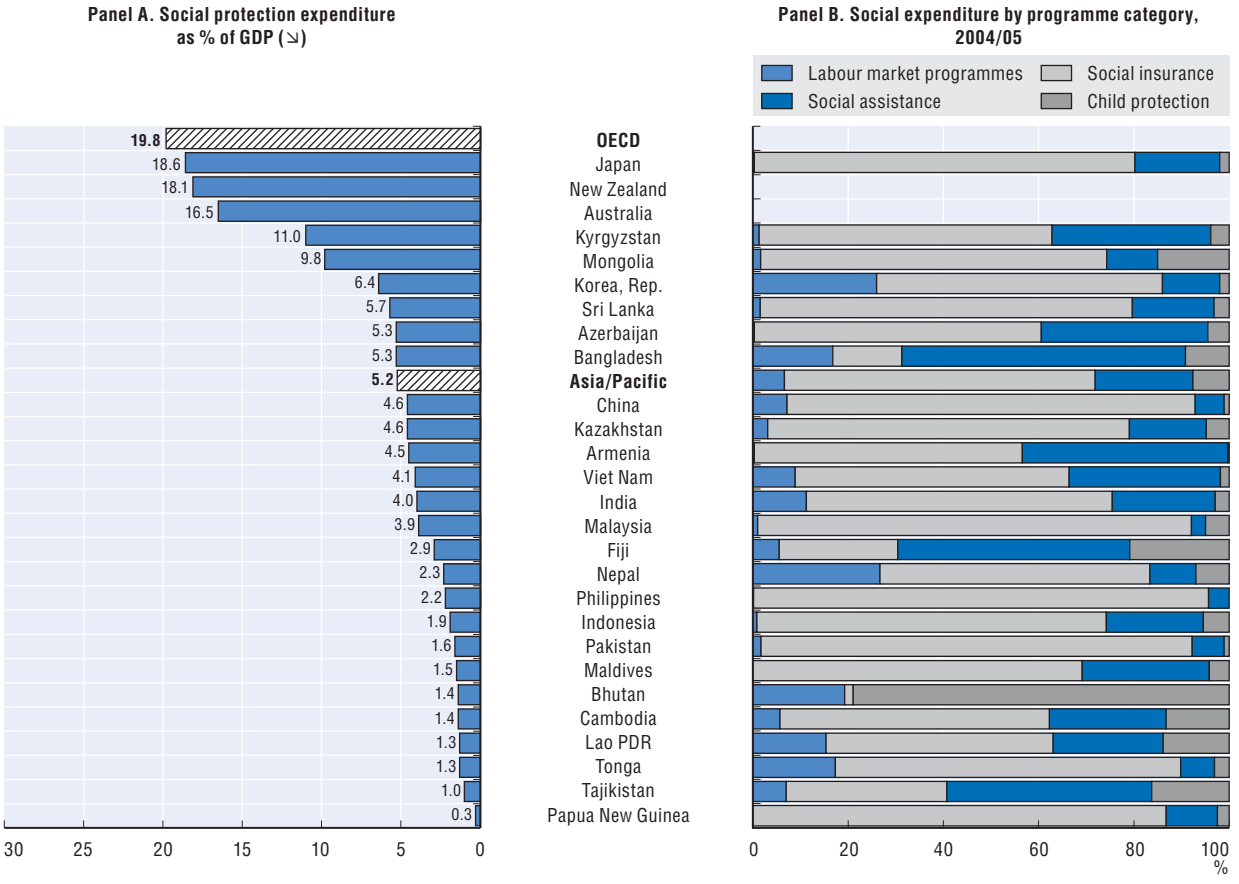
There is no tendency for a higher level of economic development to be associated with higher spending on social protection across the Asia/Pacific region (EQ5.3). Any sign of a minimal relationship is driven by three outlying richer OECD countries – Australia, New Zealand and Japan. Within the other countries, there is no relationship whatsoever. There is no reason to suggest that as the countries of the Asia/Pacific region further develop, that there will be any automatic development of the sort of welfare states that exist within the richer OECD countries.

Definition and measurement

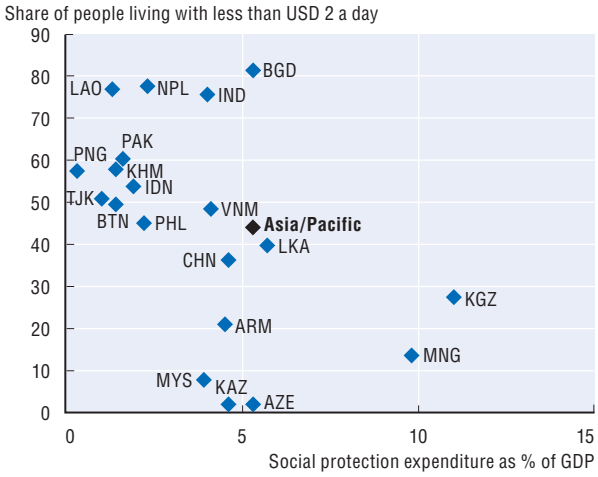
Social support to those in need is provided by families, community institutions and governments through a variety of means. In OECD countries much of this support takes the form of social expenditure, including cash benefits and tax advantages and the in-kind provision of goods and services. To be included in social spending, benefits have to address one or more contingencies, such as low income, old age, unemployment or disability. Programmes that regulate the provision of social benefits involve the redistribution of resources across households and/or compulsory participation. Social expenditure is classified as public when general government controls the relevant financial flows.

The data presented here are extracted from the Asian Development Bank's *Social Protection Index for Committed Poverty Reduction – Vol. 2: Asia* (2008, *www.adb.org/Documents/Books/Social-Protection/Volume2*), and from the *OECD's Social Expenditure Database* (SOCX, *www.oecd.org/els/social/expenditure*). It is worth noting that the ADB divides social protection into labour market programmes, social insurance, social assistance, micro- and area-wide programmes (including microcredit) and child protection. These definitions vary significantly from the OECD's, so data may not be fully comparable.

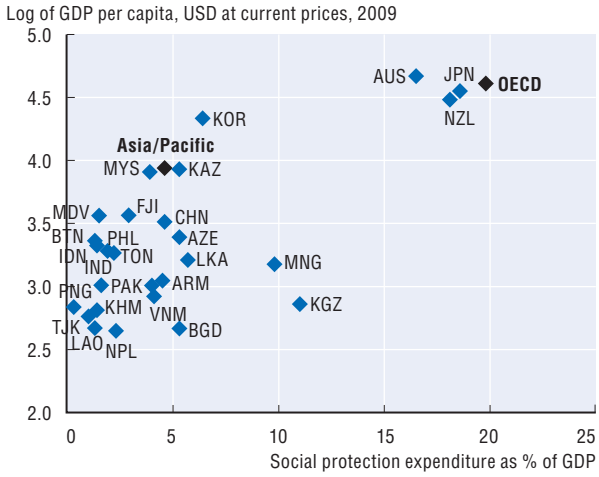
EQ5.1. **Social spending levels and composition**



EQ5.2. **Social spending and poverty**



EQ5.3. **Social spending and GDP per capita**



Source: ADB (2008), *Social Protection Index for Committed Poverty Reduction*, Vol. 2, Asia/Pacific Edition; *OECD Social Expenditure Database (SOCX) www.oecd.org/els/social/expenditure.*

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Chapter 7

Health Indicators

HE1. Life expectancy

Life expectancy at birth is a core social indicator of the quantity of life. It is perhaps the most general and best known measure of a population's health status.

Life expectancy at birth for the whole population across 22 Asian countries and economies reached 71.6 years on average in 2008, a gain of more than 14 years since 1970. By comparison, OECD countries gained nine years during the same period (Figure HE1.1). However, a large regional divide persists in life expectancy at birth. The country with the longest life expectancy in 2008 was Japan, with a combined value for men and women of 82.6 years. Hong Kong (China), Australia, Macao (China), Singapore and New Zealand all exceeded 80 years for total life expectancy. In contrast, a number of countries in the Asia/Pacific region have combined life expectancies of less than 70 years, and in Cambodia, Papua New Guinea and Myanmar, a child born in 2008 can expect to live an average of less than 62 years. Generally, East Asian countries (China, Japan and the Republic of Korea) had higher life expectancies at birth than Southeast Asian countries (Cambodia, Indonesia, Malaysia, the Philippines, Thailand, Viet Nam) and South Asian countries (India, Pakistan, Bangladesh).

Life expectancy at birth continues to increase remarkably in Asia/Pacific countries and economies, reflecting sharp reductions in mortality at all ages. Gains in longevity can be attributed to a number of factors, including rising living standards and better nutrition, water and sanitation. Improved lifestyles, increased education and greater access to quality health services also play an important role.

Despite health improvements, there are still disparities in life expectancy between men and women and within countries. Women live longer than men, and have greater rates of survival to age 65, regardless of the economic status of the country (Figures HE1.2 and HE1.3). The gender gap in life expectancy stood at 4.4 years on average across Asian countries in 2008, less than the OECD average of 5.6 years.

Higher national income (as measured by GNI per capita) is generally associated with higher life expectancy at birth (HE1.2). There are some notable differences in life expectancy between countries with similar income per capita. Viet Nam and Japan have higher life expectancies and Brunei and Thailand lower ones than would be predicted by their GNI per capita alone.

Definition and measurement

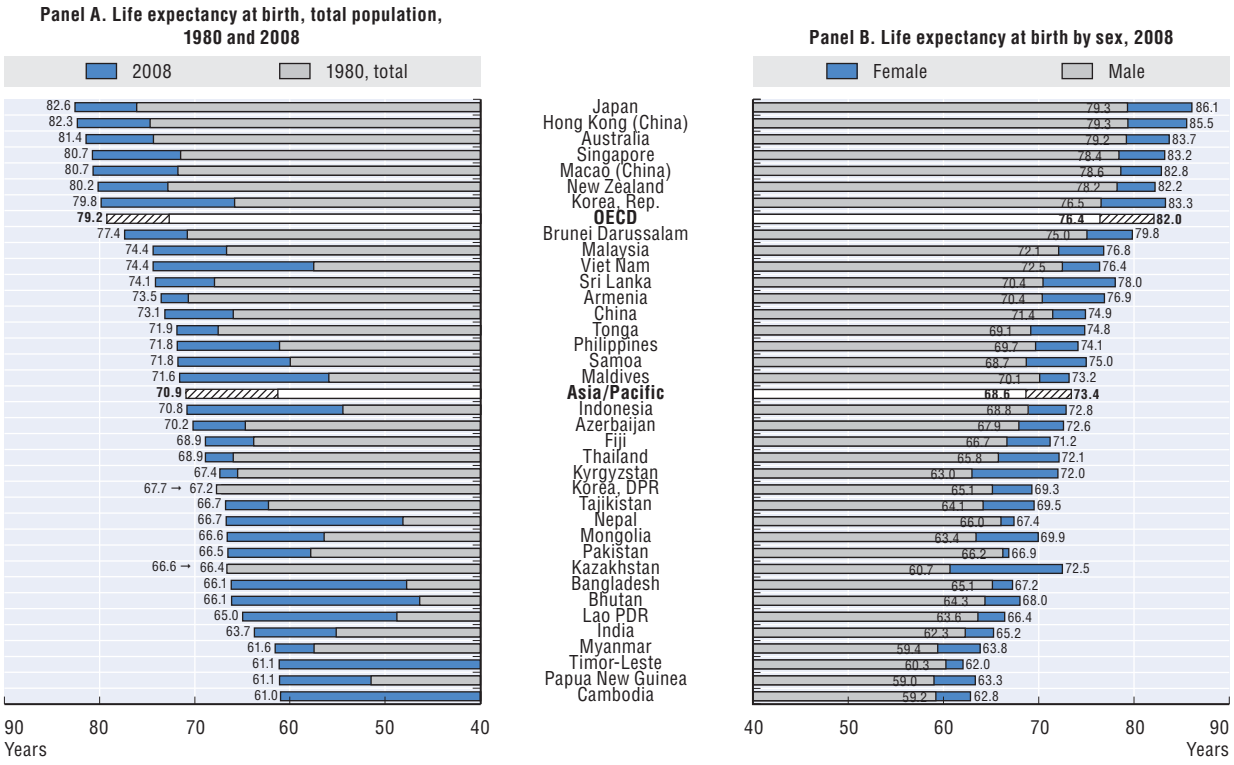
Life expectancy at birth is the best known measure of a population's health status, and is often used to gauge the development of a country's health. It measures how long, on average, a newborn infant would live if the prevailing patterns of mortality at the time of birth were to stay the same throughout their lifetime. Since the factors that affect life expectancy do not change overnight, variations are best assessed over long periods of time.

Age-specific mortality rates are required to construct life tables from which life expectancies are derived. Countries calculate life expectancy according to methodologies that can vary somewhat, and these can lead to differences of fractions of a year. Some countries base their life expectancies on estimates derived from censuses and surveys, and not on the accurate registration of deaths.

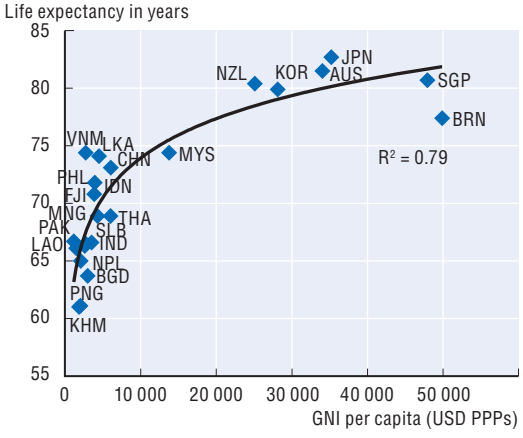
Further reading

WHO (2008), *Health in Asia and the Pacific*, World Health Organization, Regional Office for Southeast Asia, New Delhi.

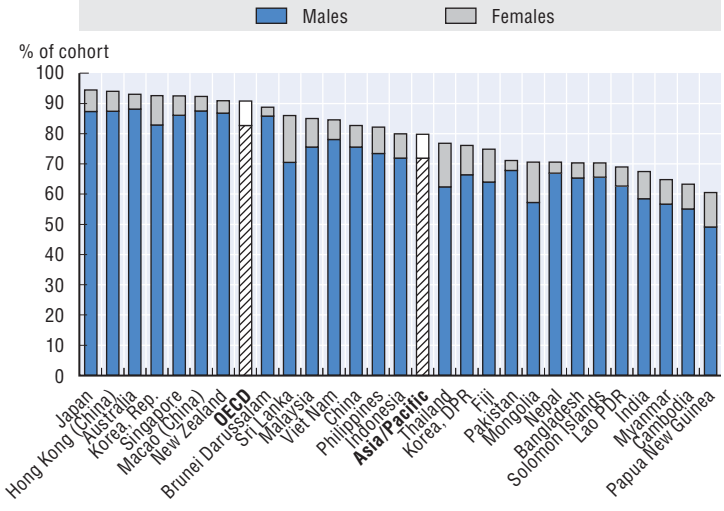
HE1.1. **Life expectancy levels and trends**



HE1.2. **Life expectancy at birth and GNI per capita, 2008**



HE1.3. **Survival rate to age 65, 2008**



Source: *OECD Health Data 2010*; World Bank, World Development Indicators online.

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HE2. Infant mortality

Infant mortality is a central indicator of infant health. Infant mortality has a significant influence on overall life expectancy, especially for those countries where infant mortality is higher. Falling infant mortality is a major influence on rises in life expectancy, especially for those countries starting at a higher infant mortality level. Infant mortality reflects the effect of economic and social conditions on the health of mothers and new-borns, as well as the effectiveness of health systems. Around two-thirds of the deaths that occur during the first year of life in the region are neonatal deaths (*i.e.* during the first four weeks of life). Factors such as the health of mothers, maternal care and birth weight are important determinants of infant mortality. Diarrhoea, pneumonia and malnutrition in both mothers and babies are the causes of many deaths.

Countries with higher levels of economic development generally have lower infant mortality rates. In 2008, OECD countries averaged five infant deaths per 1 000 live births; among 19 Asian countries, the average was 30 deaths (HE2.1). Geographically, infant mortality is lower in East Asia, and higher in South and Southeast Asia. Singapore, Japan, the Republic of Korea and Australia had under five deaths per 1 000 live births in 2008, whereas the rates in Pakistan, Myanmar, Cambodia, Papua New Guinea and India were over 50.

Infant mortality rates have fallen dramatically in the Asia/Pacific region over the last 30 years. Many countries, including China, India and Indonesia, saw declines of between 50 and 70% (HE2.1 and HE2.2). In Singapore, Malaysia, the Republic of Korea, Viet Nam and Thailand, rates have fallen by three-quarters. Falls in Myanmar, the Solomon Islands, Cambodia, Papua New Guinea and Pakistan have been less pronounced, even though these countries had high levels of infant mortality in 1980. This has led to growing gaps between these countries and others in the region.

Inequalities in infant mortality rates also exist within countries (HE2.3), with the richest population quintile gaining access to key health interventions more quickly than the poorest. Reducing both types of inequity – between and within countries – is crucial for achieving lasting reductions in infant mortality across the Asia/Pacific region.

Definition and measurement

The infant mortality rate is one of the most important statistics for measuring the health of a population. It is defined as the number of children who die before reaching their first birthday in a given year, expressed per 1 000 live births. Some countries base their infant mortality rates on estimates derived from censuses and surveys, and not on the accurate registration of births and deaths. Differences among countries in registering premature infants may also add slightly to international variation.

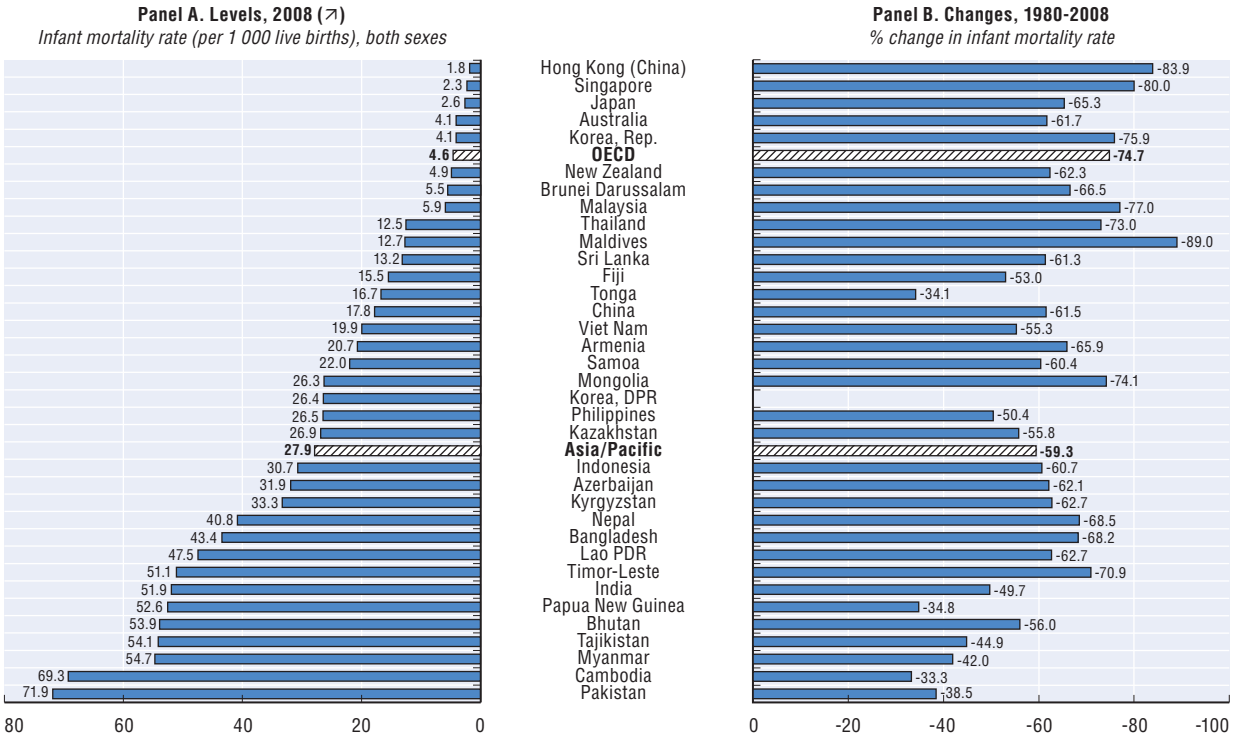
The data for OECD countries come from *OECD Health Data 2010*. The data for Hong Kong (China) come from the 1985 and 2008 United Nations Demographic Yearbook. For other countries, the data were extracted from the UNICEF Childinfo Database (*www.childinfo.org/mortality.html*). Data on infant mortality by wealth quintile are based on *Demographic and Health Surveys* (DHS 2006-2009) and Gwatkin *et al.* (2007).

Further reading

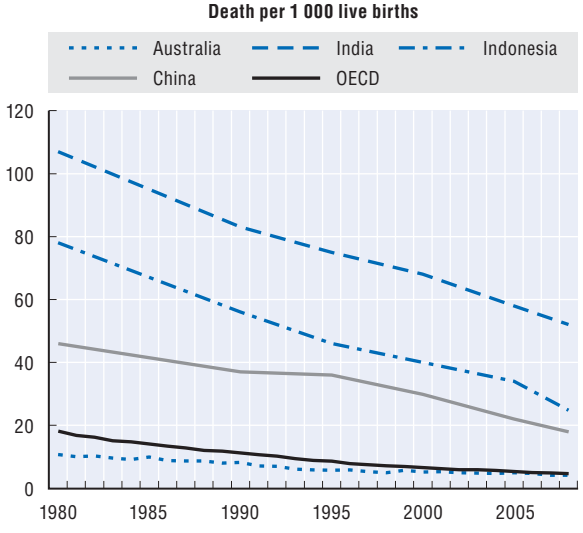
Gwatkin, D.R., S. Rutstein, K. Johnson, E. Suliman, A. Amouzou and A. Wagstaff (2007), "Socioeconomic Differences in Health, Nutrition and Poverty", HNP/Poverty Thematic Group of the World Bank, World Bank, Washington, DC.

UNICEF (2008), *Tracking Progress in Maternal, Newborn and Child Survival: The 2008 Report*, UNICEF, New York.

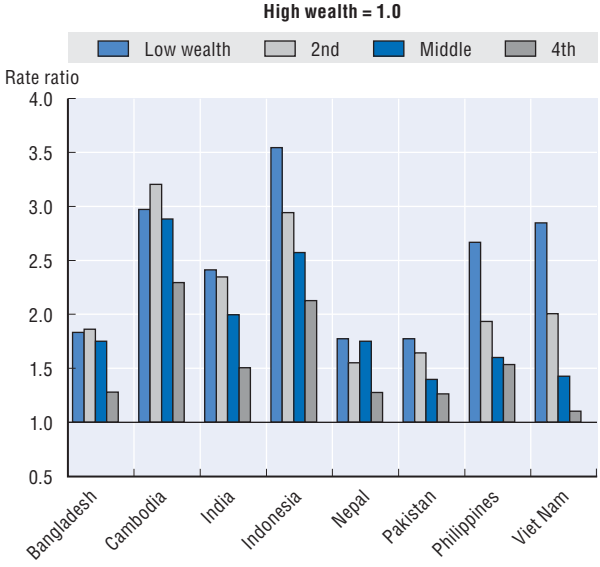
HE2.1. **Infant mortality levels and trends**



HE2.2. **Infant mortality rates, selected countries, 1980-2008**



HE2.3. **Infant mortality rate, ratios by wealth quintiles, selected countries**



Note: HE2.1: 2006 data for the Republic of Korea. Change is for 1981-2006.

Source: For OECD countries: OECD Health Data 2010. For non-OECD countries and economies: *United Nations Demographic Yearbook 2009-2010*, UNICEF 2008 report; Demographic and Health Surveys; Gwatkin *et al.* (2007).

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HE3. Water and sanitation

Having access to a high quality local environment, measured here in terms of the proportion of the population with access to improved water and sanitation, is important for healthy living. Poor air and water quality can adversely influence both physical and psychological health.

Improved water and sanitation coverage is highest amongst the OECD countries of the Asia/Pacific region (Panel A, HE3.1). At the other end of the scale, one-third or fewer of the populations of India, Nepal and Cambodia are covered by improved sanitation. Generally speaking, water coverage is better than sanitation coverage in most countries. Additionally, those countries with better sanitation coverage also tend to have better improved water coverage.

Water and sanitation quality have been improving for most Asia/Pacific countries and economies between 1990 and 2008. In Mongolia, for example, the coverage of improved sanitation rose by 50 percentage points, while coverage of improved water rose by 18 percentage points. Similar gains were registered in Azerbaijan, with 45 percentage points and 10 percentage points, respectively, and in Viet Nam, with 40 percentage points and 36 percentage points, respectively.

Poor rates of improved sanitation and improved water are associated with higher rates of infant mortality (HE3.2 and HE3.3). Improving sanitation and water quality are public health measures that can reduce mortality, particularly of infants, who are especially vulnerable to diarrheal diseases and consequently a higher risk of mortality. Additionally, the relationship may reflect some common third factor. The most obvious other factor is the level of economic development, which constrains the affordability of high quality water and sanitation, as well as restricting tried and true medical and other public health innovations that can lower infant mortality.

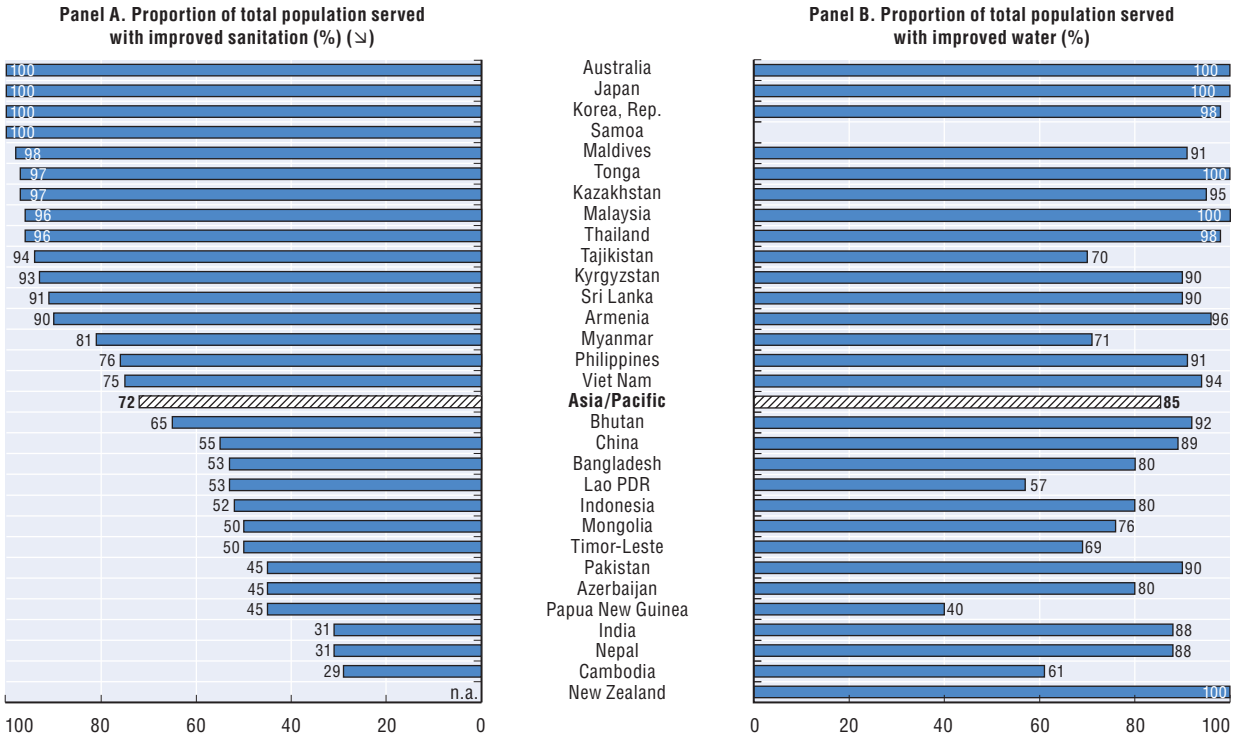
Definition and measurement

Data on the percentage of the population with improved water (public taps, protected wells, rainwater) and sanitation (flush toilet, septic tank, pit latrine, composting toilet, etc.) come from the WHO JMP data set (*www.wssinfo.org/datamining/introduction.html*). Definitions are discussed in detail in WHO/UNICEF (2010). Sources of infant mortality data are described in HE2.

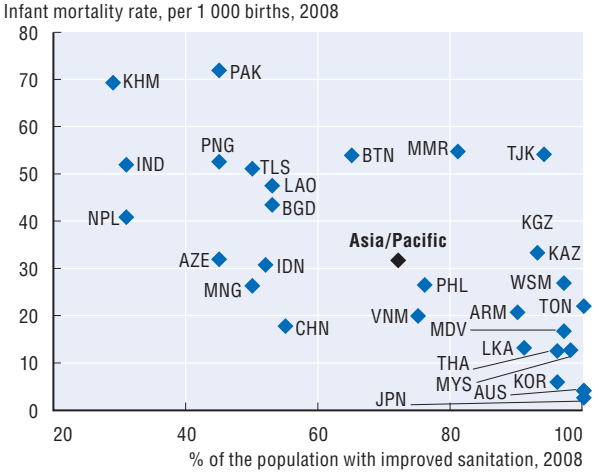
Further reading

WHO/UNICEF (2010), "Joint Monitoring Programme for Water Supply and Sanitation. Progress on Sanitation and Drinking Water", 2010 Update.

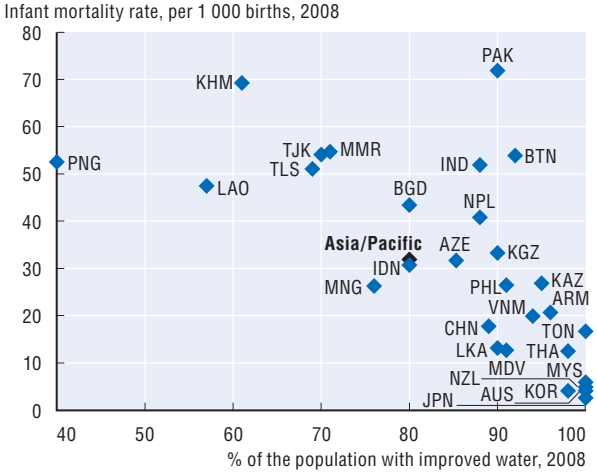
HE3.1. **Water and sanitation**



HE3.2. **Poor sanitation coverage and high infant mortality go together**



HE3.3. **Poor improved water coverage and high infant mortality go together**



Note: HE3.1: Panel A data are not available for New Zealand.

Source: World Health Organisation JMP dataset (*www.wssinfo.org/datamining/introduction.html*). Definitions are discussed in detail in WHO/UNICEF (2010).

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HE4. Adult height

Adult height is determined both by genetic potential and by net nutrition during the entire period of childhood. Poor net nutrition – net nutrition being the balance between food intake and losses due to physical activity and diseases – may affect adult height by up to 10-15 centimeters (Steckel, 2008). For adults to reach their height potential, six generations of optimal growth conditions are necessary (Cole, 2003). In richer countries, about one-fifth of within-population height variation is due to family and neighbourhood circumstances. In poorer countries, this proportion will be larger because of greater within-population environmental variation and a shorter history of optimal growth conditions.

Adult height varies considerably across Asia/Pacific countries and economies. Men and women are the tallest in island countries of the South Pacific: Australia, Tonga, New Zealand and Fiji. They are shortest in the larger Asian islands of Indonesia and the Philippines and on the Indian sub-continent (HE4.1 and HE4.2). In Australia, men are as tall as 1.78 m, whereas in Indonesia men have an average height of 1.62 m. Tongan women are 1.66 m tall, while women in the Maldives are 1.50 m tall.

In all countries except North Korea and Timor both men and women are getting taller. However, the height difference between cohorts aged 45-49 and 0-24 varies greatly by country (HE4.3). In the Republic of Korea, young men are almost 6 cm taller than their father's generation. In the Democratic People's Republic of Korea young men are the same height as their fathers. Except in Mongolia and Malaysia, height gains are much greater for men than for women. Contrary to developments in the OECD, countries with shorter populations are not catching up to those with taller populations.

Countries with more rapid economic growth when young women aged 20-24 were children are getting taller faster (HE4.4). Economic growth allows height growth through better nutrition and the provision of better water, sanitation and health care. At the same time, the enhanced ability of taller and stronger people to work more productively may also stimulate growth (Deaton, 2007).

Definition and measurement

Ideally, adult height data is recorded for people aged between 20 and 49 years. People reach their full adult height in their early 20s while above age 50 people start physically shrinking (Deaton, 2007). Measured height is preferred over self-reported height, as people tend to overestimate their own stature (Gorber *et al.*, 2007; Lim *et al.*, 2009). Self-reported height data is used only for Australia.

When possible, data was obtained directly from specialised health surveys. For India, Bangladesh, Nepal, Cambodia, Kazakhstan, Armenia and Azerbaijan, the data were taken from *Demographic and Health Surveys*. Weights provided in the databases were applied. For China, data is from the *China Health and Nutrition Survey,* which uses a multistage, random cluster process to draw the sample surveyed in each of the nine provinces included. No additional weights were applied. For Indonesia, data comes from the *Indonesian Family Life* Survey conducted in 2007/08 by RAND, the Center for Population and Policy Studies of the University of Gadjah Mada and Survey METRE. The sample is representative of about 83% of the Indonesian population. For the Democratic People's Republic of Korea, data is from Korean escapees who arrived in the Republic of Korea between 1999 and 2003. Consequently there may be selection-bias issues. For the rest of the countries, data comes either from national official reports or from published health papers. Details on height sources for the OECD countries are in OECD (2009).

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Cole, T.J. (2003), "The Secular Trend in Human Physical Growth: A Biological View", *Economics and Human Biology,* Vol. 1, pp. 161-168.

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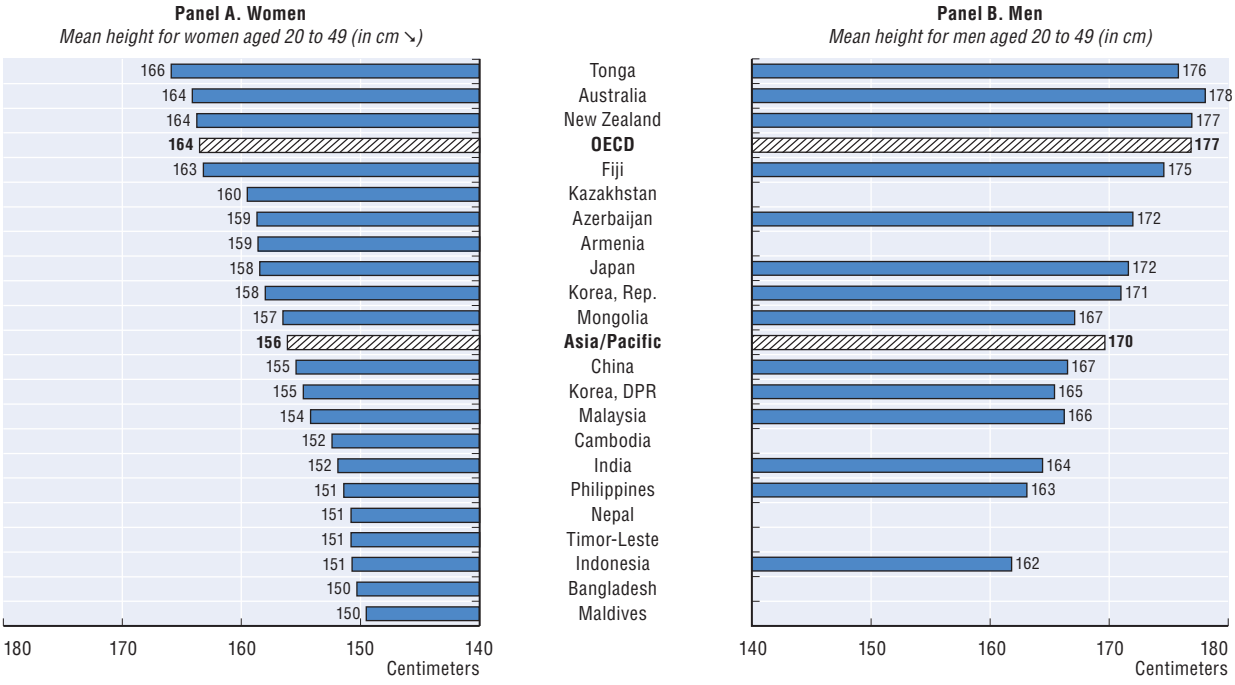
Gorber, S.C. *et al.* (2007), "A Comparison of Direct vs. Self-report Measures for Assessing Height, Weight, and BMI: A Systematic Review", *Obesity Reviews*, Vol. 8, No. 4, pp. 307-326.

Lim, L.Y., Sam-ang Seubsman and Sam-ang Sleigh (2009), "Validity of Self-reported Weight, Height, and Body Mass Index Among University Students in Thailand: Implications for Population Studies of Obesity in Developing Countries", *Population Health Metrics,* Vol. 7, No. 15.

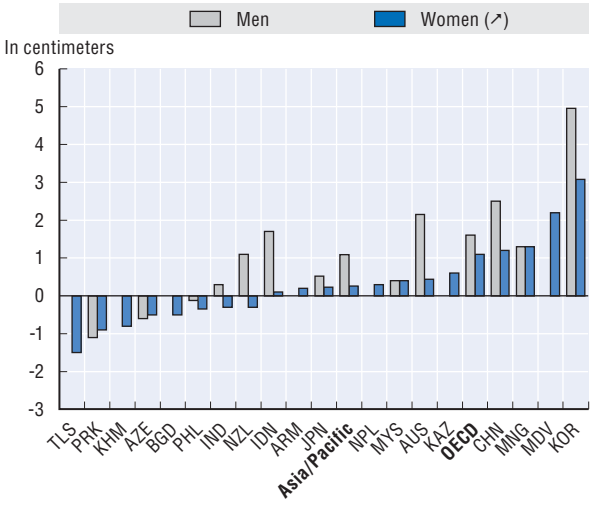
OECD (2009), *Society at a Glance: OECD Social Indicators*, OECD Publishing, Paris.

Steckel, R.H. (2008), "Heights and Human Welfare: Recent Developments and New Directions", *Working Paper,* No. 14536, National Bureau of Economic Research.

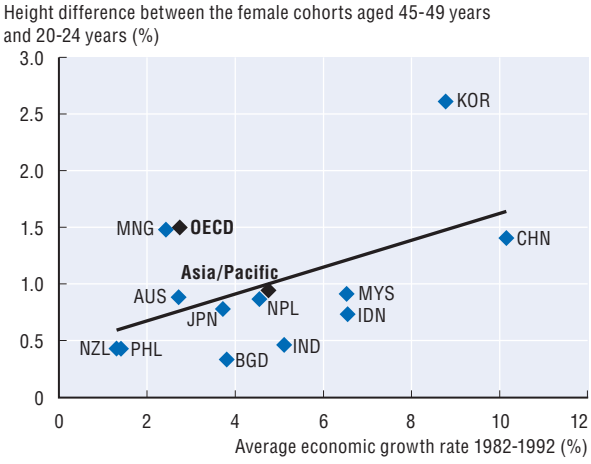
HE4.1. **Men and women heights**



HE4.2. **Height difference between those aged 20-24 and 45-49 years**



HE4.3. **Height difference and economic growth go together**



Note: For Tonga, the mean heights are for people aged 15 and over. For Mongolia, mean heights are for people aged 25 to 54.
For Maldives and the DPR of Korea, those aged 20-24 are compared to those aged 40-49. For Malaysia, those aged 20-29 are compared to those aged 40-49. For Philippines, those aged 20-39 are compared to those aged 40-59 and for Mongolia, those aged 25-34 are compared to those aged 45-54.
For Maldives, Malaysia and the DPR of Korea, the oldest cohort includes those aged 40-49. For Philippines, the oldest cohort includes those aged 40-59 and for Mongolia those aged 45-54.
Data on economic growth comes from the World Bank.

Source: Craig, P., S. Colagiuri, Z. Hussain and T. Palu (2007), "Identifying Cut-points in Anthropometric Indexes for Predicting Previously Undiagnosed Diabetes and Cardiovascular Risk Factors in the Tongan Population", *Obesity Research and Clinical Practice*, Vol. 1, pp. 17-25; Food and Nutrition Research Institute (2003), *Philippine Facts and Figures 2003*, Part II "Anthropometric Facts and Figures"; Ministry of Health, Republic of Maldives (2001), "Multiple Indicator Cluster Survey (MISC 2)"; Ministry of Health and National Statistics Office, Timor-Leste, and University of Newcastle, the Australian National University, ACIL Australia Pty Ltd., Australia (2004), "Timor-Leste 2003 Demographic and Health Survey", University of Newcastle, Australia; My, A.R., R. Junidah, A. Siti Mariam *et al.* (2009), "Body Mass Index (BMI) of Adults: Findings of the Malaysian Adult Nutrition Survey (MANS)", *Malaysian Journal of Nutrition*, Vol. 15, No. 2, pp. 97-119; National Food and Nutrition Centre (2007), "2004 Fiji National Nutrition Survey", Main Report; Pak, S. (2004), "The Biological Standard of Living in the Two Koreas", *Economics and Human Biology*, Vol. 2, pp. 511-521; World Health Organization (2007), "Mongolian STEPS Survey on the Prevalence of Noncommunicable Disease Risk Factors 2006"; *OECD Health Data*.

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HE5. Health expenditure

Private and public health spending provides an important indication of the extent to which governments and people devote resources to improving health. Health spending is thus an important societal response to improve health outcomes that is comparable across countries.

There is much variation between the Asia/Pacific countries and economies in the share of GDP spent on health (Panel A, HE5.1). New Zealand and Australia spend around 9% of their GDP. By way of contrast, Indonesia and Myanmar spend about 2%. While the general pattern is for richer countries to spend a higher share of GDP on health, Singapore – a country with relatively high per capita GDP – spends a relatively low proportion.

Health spending in the Asia/Pacific region, unlike in the OECD, has barely increased as a share of GDP in the last ten years (Panel B, HE5.1).Rises have been most pronounced, but still well below the OECD average, in Viet Nam, the Republic of Korea and New Zealand. Falls in health spending shares were observed in a number of countries, most notably Brunei and Nepal.

Countries that spend more of their income on health tend to have better health outcomes, as measured by life expectancy (HE5.2). But this relationship seems to be diminishing. That is to say, there are stronger gains from increasing health spending for low life expectancy countries than for high life expectancy countries.

Additionally, the countries that spend considerably on health are those with higher GDP (HE5.3).However, in terms of GDP shares, Brunei and Singapore spend much less on health as a proportion of GDP than one would anticipate given their per capita income, and Viet Nam and Cambodia spend an unexpectedly high proportion on health than would be expected given their per capita income.

Definition and measurement

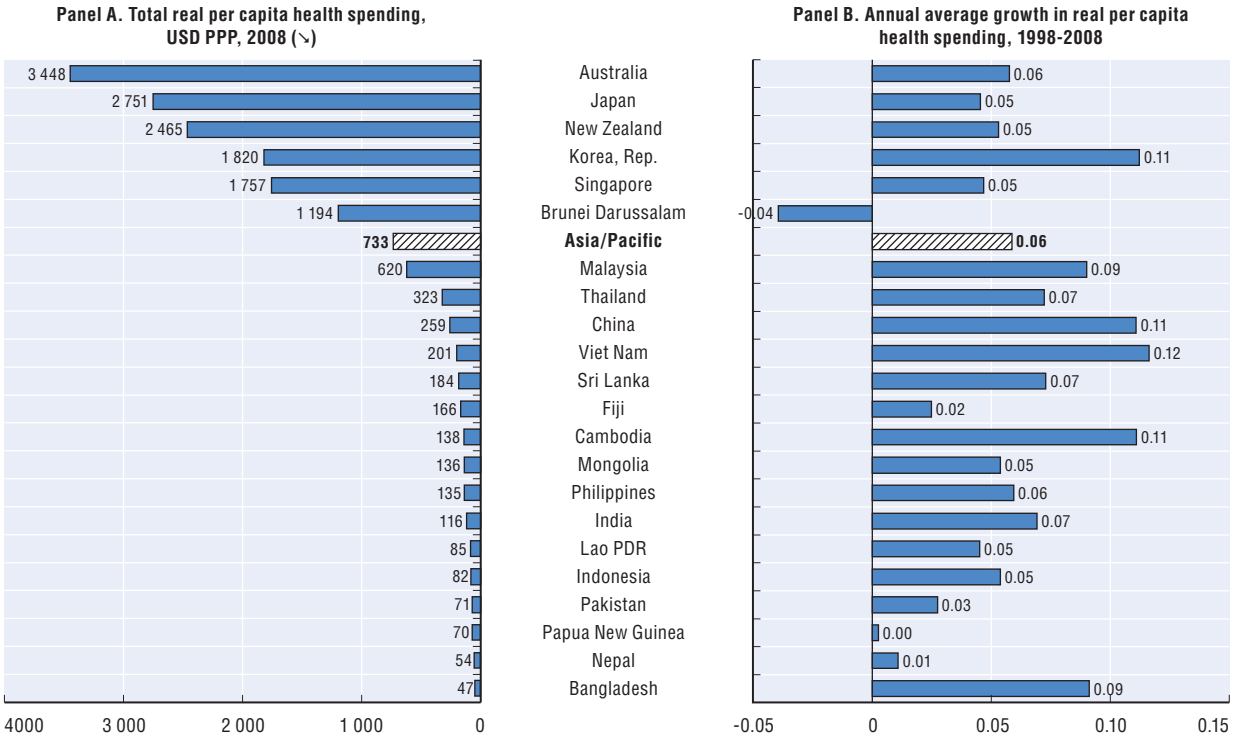
Total health expenditure is given by the sum of expenditure on all the core health care functions – that is, total health care services, medical goods dispensed to outpatients, prevention and public health services, and health administration and health insurance – plus capital formation in the health care provider industry. Expenditure on these functions is included as long as it is borne for the final use of resident units, *i.e.* as long as it is final consumption by nationals in the country or abroad. For this reason, imports for final use are included and exports for final use are excluded.

Further reading

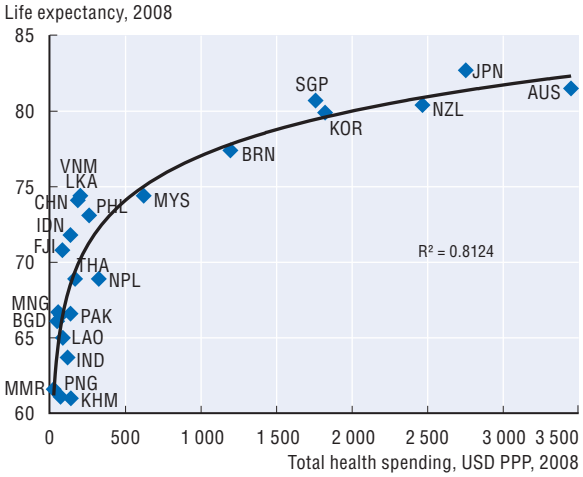
OECD (2000), *A System of Health Accounts*, version 1.0, OECD Publishing, Paris.

WHO (2010), *National Health Accounts country data*, World Health Organisation, Geneva.

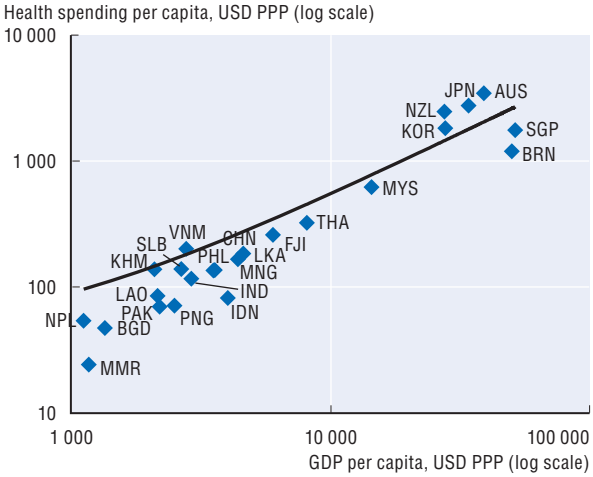
HE5.1. **Health spending, 2008**



HE5.2. **Health spending and life expectancy, 2008**



HE5.3. **Health spending and GDP per capita, 2008**



Source: OECD Health Data, Paris; WHO (2010), *National Health Accounts Country Cata*, World Health Organisation, Geneva; WHO NHA Database (2010).

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Chapter 8

Social Cohesion Indicators

CO1. Life satisfaction

Life satisfaction represents people's subjective evaluation of their satisfaction with life as a whole. It is strongly associated with good family relationships, health and confidence in governance in the broader society. For low-income countries, life satisfaction at a country level is related to country-level income.

Life satisfaction in the Asia/Pacific countries and economies is lower than in the OECD countries (Panel A, CO1.1). The OECD average stands at 6.6, whereas the average for the Asia/Pacific countries and economies is only 5.3. Furthermore, this average is pushed upward by Australia and New Zealand, which rank at the top with, respectively, 7.4 and 7.3.

There are considerable differences across Asia/Pacific countries and economies regarding the degree to which people are satisfied with their lives. New Zealand, Australia and Thailand, the three countries with the highest life satisfaction, are three average steps higher up the ladder compared with the bottom three countries (Sri Lanka, Armenia and Cambodia).

Countries where well-being scores are high also have a longer satisfied life expectancy (Panel B, CO1.2). Furthermore, disparities in satisfied life expectancy are higher than for life satisfaction. In New Zealand, the satisfied life expectancy is 2.4 times higher than in Cambodia, which stands at the bottom of the ranking. In Hong Kong (China), despite a relatively high life expectancy, life satisfaction is rather low. People are, however, expected to live 42 years satisfied with their lives, which is four years more than the average for Asia/Pacific countries and economies. Actually, Hong Kong (China) stands as an outlier in terms of the correlation between well-being and life expectancy, which is a more objective measure of health status. In Thailand however, life satisfaction is relatively high compared to life expectancy at birth (CO1.3).

In richer countries, people tend to have a longer satisfied life expectancy (CO1.3). The correlation is quite strong between GDP per capita and satisfied life expectancy, with only a few outliers.

Life satisfaction is higher in richer countries (CO1.3). Nevertheless, there are interesting outliers from the regression line, such as Thailand, which generates higher life expectancy than predicted by its GDP per capita. On the other hand, Hong Kong (China) has a lower well-being score than expected given its per capita level of wealth. There was no relationship between income inequalities and life satisfaction.

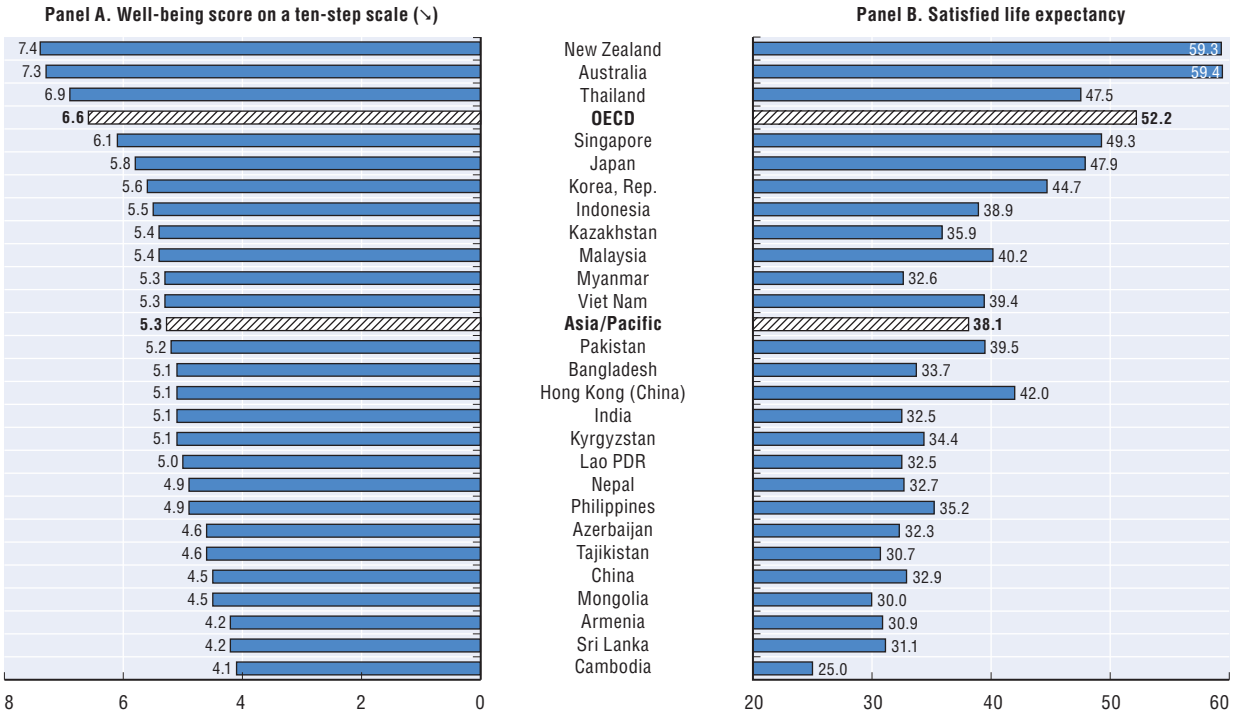
Data and measurement

Subjective measures of life satisfaction assess the extent to which individuals favourably evaluate the overall quality of their lives. Data on life satisfaction were gathered by the Charities Aid Foundation and come from *Gallup's World View World Poll* (worldview.gallup.com). Interviewees were asked to assess the way they feel using a ten-step ladder, with zero representing the worst possible and ten the best possible. Samples are representative of a population aged 15 and older. The measure of satisfied life expectancy corresponds to the standard life expectancy multiplied by the score of well-being standardised on a scale ranging from 0 to 1, as in Veenhooven (1996). Data on life expectancy come from the World Bank.

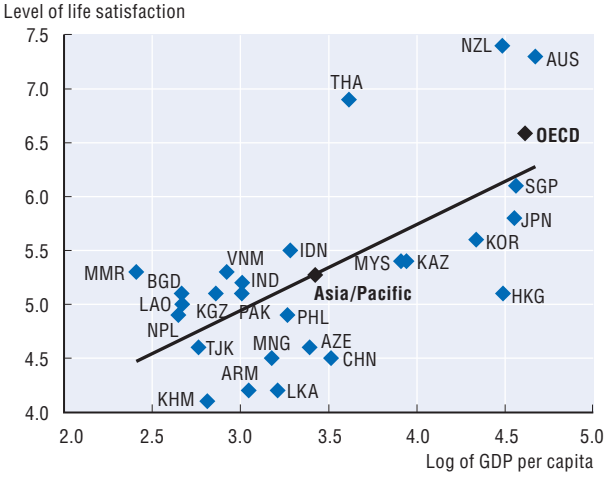
Further reading

Veenhooven, R. (1996), "Happy Life Expectancy", *Social Indicators Research*, Vol. 39, No. 1, pp. 2-58.

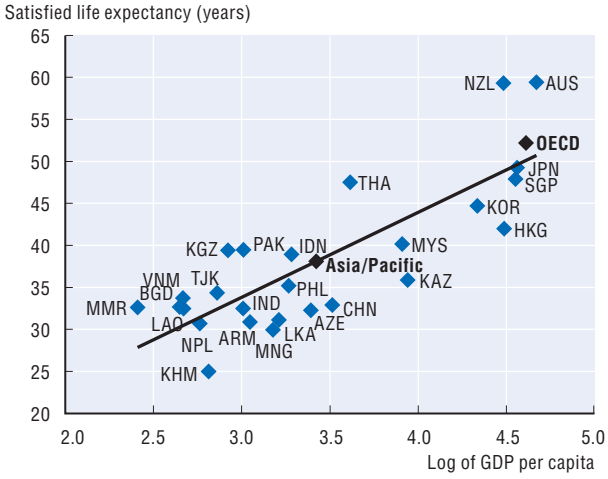
CO1.1. **Life satisfaction and satisfied life expectancy**



CO1.2. **In richer countries people are more satisfied**



CO1.3. **Richer countries have a higher satisfied life expectancy**



Note: CO1.1. Satisfied life expectancy=standard life expectancy x 0-1 happiness.
CO1.2: The GDP per capita is expressed in current USD per person. Data are derived by first converting the GDP in national currency to USD and then dividing it by the total population. 2008 data except Greece, the Republic of Korea, New Zealand, Portugal, Spain, Bangladesh, Brunei, Cambodia, Indonesia, Mongolia, Samoa, Singapore, Sri Lanka, Tajikistan, Timor-Leste, and Viet Nam 2007; Switzerland, Azerbaijan, Fiji, Myanmar and Tonga 2006; Japan and the Lao People's Democratic Republic 2005; Armenia 2004; and Papua New Guinea 2000.

Source: The World Giving Index 2010, calculations made by Charities Aid Foundation based on Gallup World Poll Data. Source for life expectancy: World Bank indicators, IMF (2009), *World Economic Outlook* online database, *www.imf.org/external/ns/cs.aspx?id=28*.

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CO2. Trust

Trust reflects people's perception of other people's reliability. Trust may affect economic and social development by facilitating market exchanges, promoting the better functioning of public institutions and increasing the capacity for collective action (Morrone *et al.*, 2009).

Levels of trust vary considerably across the region (Panel A, CO2.1). Trust is highest in China, Viet Nam and New Zealand, where just over half the population agree that people can generally be trusted. At the opposite end of the scale, fewer than one in ten people in Malaysia and the Philippines agree that people can generally be trusted.

There is no general pattern behind recent changes in trust (Panel B, CO2.1). Large rises can be observed in Pakistan and the Philippines, and large falls in Indonesia and India.

In most countries across the region there is a persistent tendency for men to be more trusting than women (CO2.2). The difference is most pronounced in Thailand and Indonesia, but this trend is reversed in Kyrgyzstan and Armenia, where there is greater trust amongst the female population.

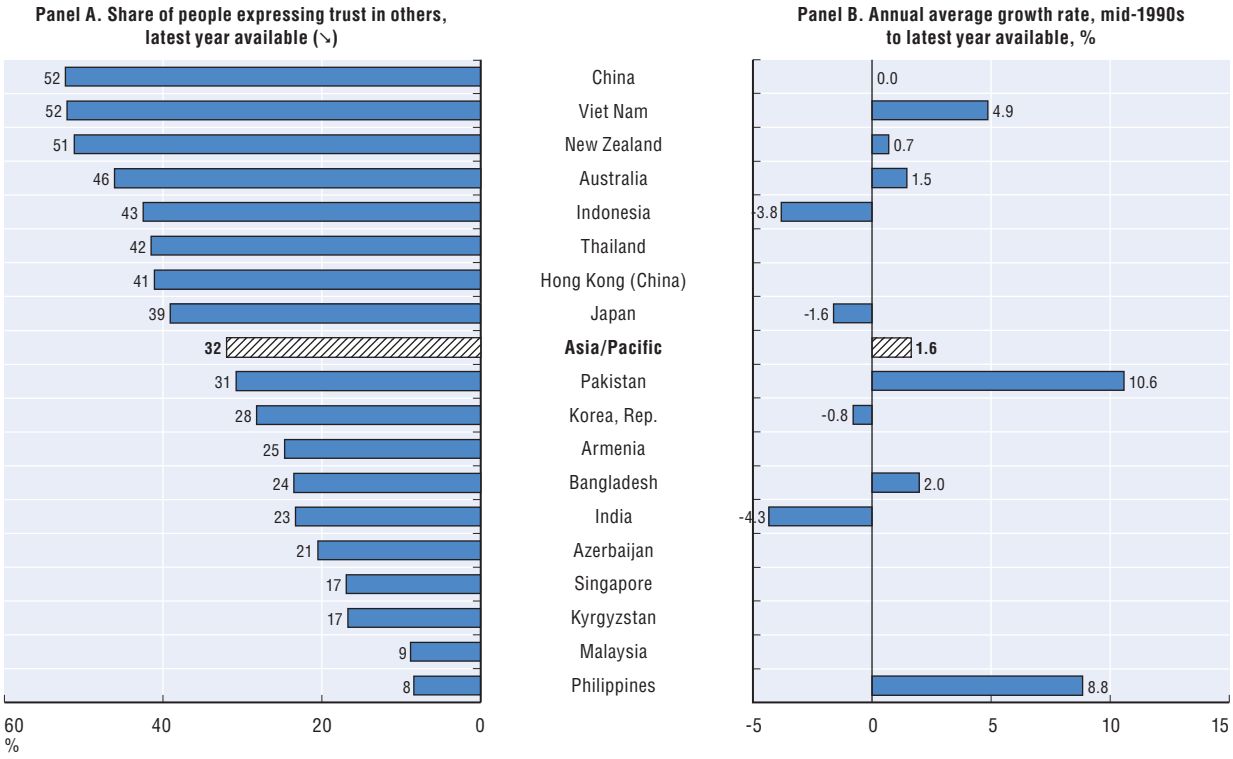
Definition and measurement

Trust data is based on the question: Generally speaking would you say that most people can be trusted or that you need to be very careful in dealing with people? Data come from the *World Values Survey* for various years.

Further reading

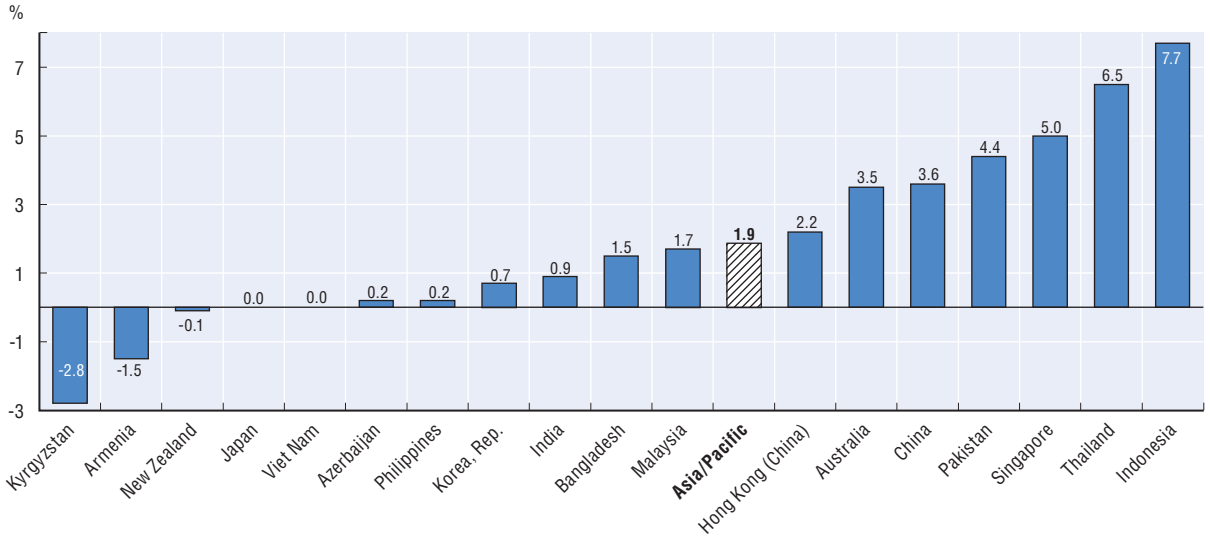
Morrone, A., N. Tontoranelli and G. Ranuzzi (2009), "How Good is Trust? Measuring Trust and its Role for the Progress of Societies", *OECD Statistics Working Paper*, OECD Publishing, Paris.

CO2.1. **Trust levels and trends**



CO2.2. **Men tend to trust more than women**

Percentage points difference in the share of men expressing trust in others and the share of women



Source: World Values Survey Databank, Online data analysis: *www.wvsevsdb.com/wvs/WVSAnalizeStudy.jsp.*

StatLink http://dx.doi.org/10.1787/888932546566

CO3. Social behaviour

Pro-social behaviour is behaviour that contributes to the positive functioning of society and is the antithesis of anti-social behaviour. Pro-social behaviour measures an important positive dimension of societal cohesion. The indicator here picks up three pro-social actions: volunteering time, giving money and helping a stranger. Anti-social behaviour is picked up by an indicator of perceived corruption.

Australia and New Zealand have the highest amounts of pro-social behaviour in the Asia/Pacific region and indeed in the world (Panel A, CO3.1). Pro-social behaviour is also notably high in Sri Lanka and the Lao People's Democratic Republic. Pro-social behaviour is notably low in China, Bangladesh and Pakistan, amongst the lowest in the world, not simply in the region.

Australia and New Zealand also have the lowest amounts of anti-social behaviour in the Asia/Pacific region and indeed the world, as measured by perceived corruption (Panel B, CO3.1). Perceived corruption is notably high (low index) in Cambodia, Kyrgyzstan and Myanmar.

Anti-social behaviour, in the form of corruption, is also high in those three countries. Hong Kong (China) is quite high on pro-social behaviour suggesting that it is not simply culture that is driving low pro-social behaviour in China. Singapore is another interesting case, with lower than average pro-social behaviour, but a high performance on the low corruption index.

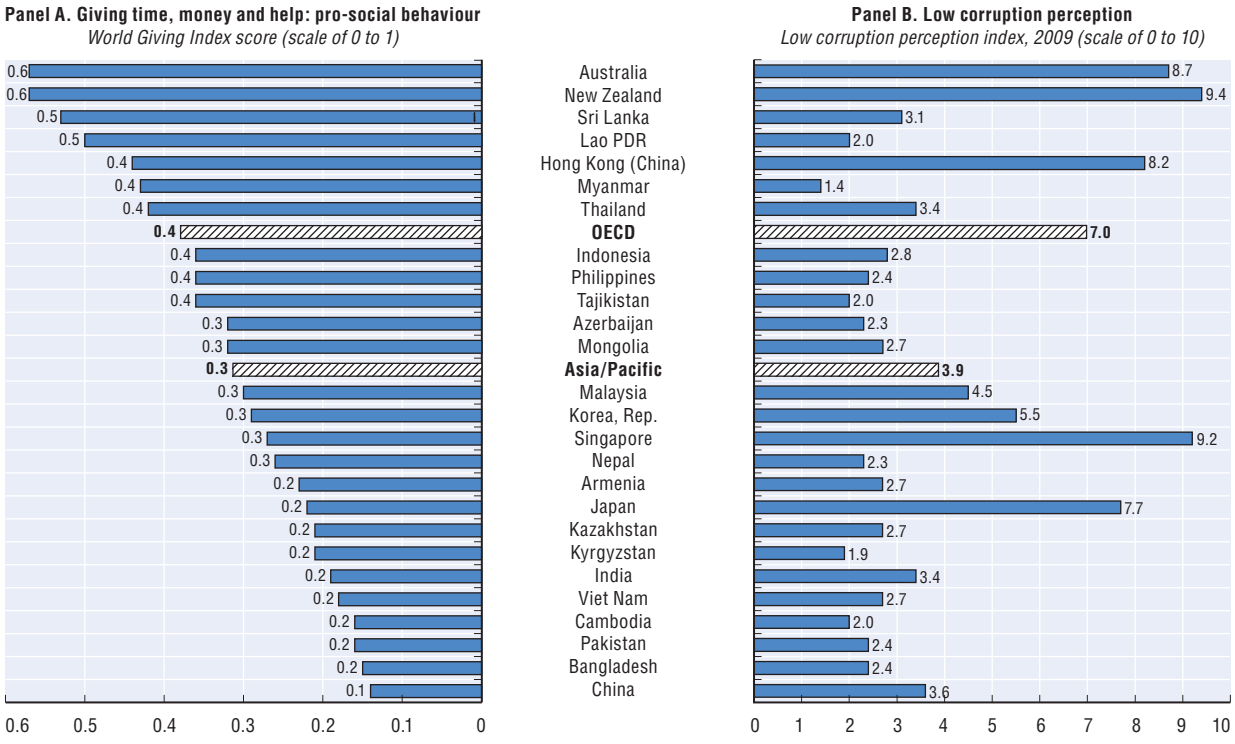
Richer countries do not do better on the giving index (CO3.2). Contrary to what might be expected, richer countries are not systematically more generous with time, money or help for a stranger. Japan and Australia are both rich countries, but the former is low on the giving index and the latter high. Bangladesh and the Lao People's Democratic Republic are both poorer countries, but the former is low on the giving index and the latter high.

However, richer countries do have a better corruption perception index (CO3.3). The relationship between GDP per capita and corruption is very strong. It may be that low corruption is a luxury good that only richer countries can afford, or it may be that lowering corruption may be one of the conditions necessary to reach a certain level of GDP per capita.

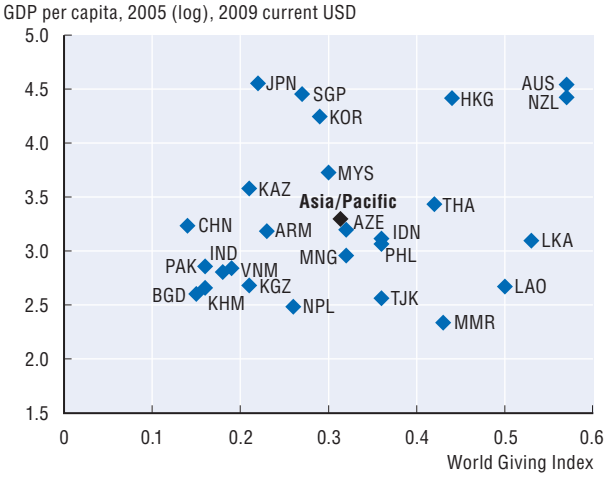
Definition and measurement

Data on pro-social behaviour come from the World Giving Index, and are collected by Gallup. Corruption data come from the Transparency International Corruption Perceptions Index.

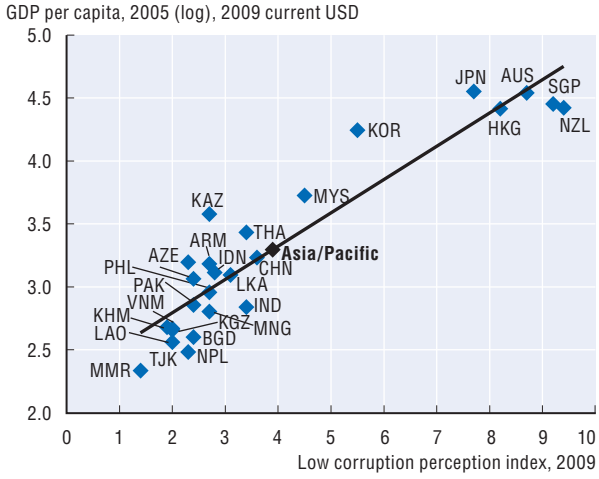
CO3.1. **Pro-social behaviour and low corruption perception index**



CO3.2. **There is no correlation between giving and country wealth**



CO3.3. **Richer countries have a better corruption perception index**



Source: Data on pro-social behaviour come from the World Giving Index, and are collected by Gallup. Corruption data come from the Transparency International Corruption Perceptions Index.

StatLink http://dx.doi.org/10.1787/888932546585

CO4. Suicide

Intentionally killing oneself is evidence not only of personal breakdown, but also of a deterioration of the social context in which a person lives. Suicide is most likely to occur during crisis periods associated with divorce, unemployment, clinical depression or other forms of mental illness.

The average suicide rate for the Asia/Pacific region is close to 12 per 100 000 (CO4.1). However, disparities in suicide rates are huge. In Kazakhstan, Sri Lanka and the Lao People's Democratic Republic, suicide rates are more than six times higher than the rates of Brunei, Azerbaijan, and Philippines.

Average suicide rates have increased across Asia/Pacific countries and economies (CO4.1). In the Republic of Korea, suicide rates almost tripled. The economic downturn, weakening social integration and the erosion of the traditional family support base for the elderly have all been implicated in Korea's recent increase in suicide rates.

In general worldwide, suicide rates are greater for men than for women (CO4.2). However, in China, in 2004, there were almost 100 000 more suicides committed by women than by men. China accounts for 40% of female suicides worldwide. In countries with larger rural populations, such as India, China, Pakistan, Sri Lanka and Nepal, the most frequent method of suicide is poisoning by pesticide (Gunnell *et al.*, 2007). Ready access to lethal pesticides results in an increased number of fatalities from low-intent suicide behavior.

In most countries, except Kazakhstan, New Zealand and Australia, suicide rates are higher among older people. Older people seem to be at particular risk in Chinese populations (China, Hong Kong [China], Macao [China], Singapore) and the Republic of Korea (CO4.3). In the Republic of Korea, suicide rates for those over age 65 are more than five times higher than suicide rates of 15-34 year-olds.

Definition and measurement

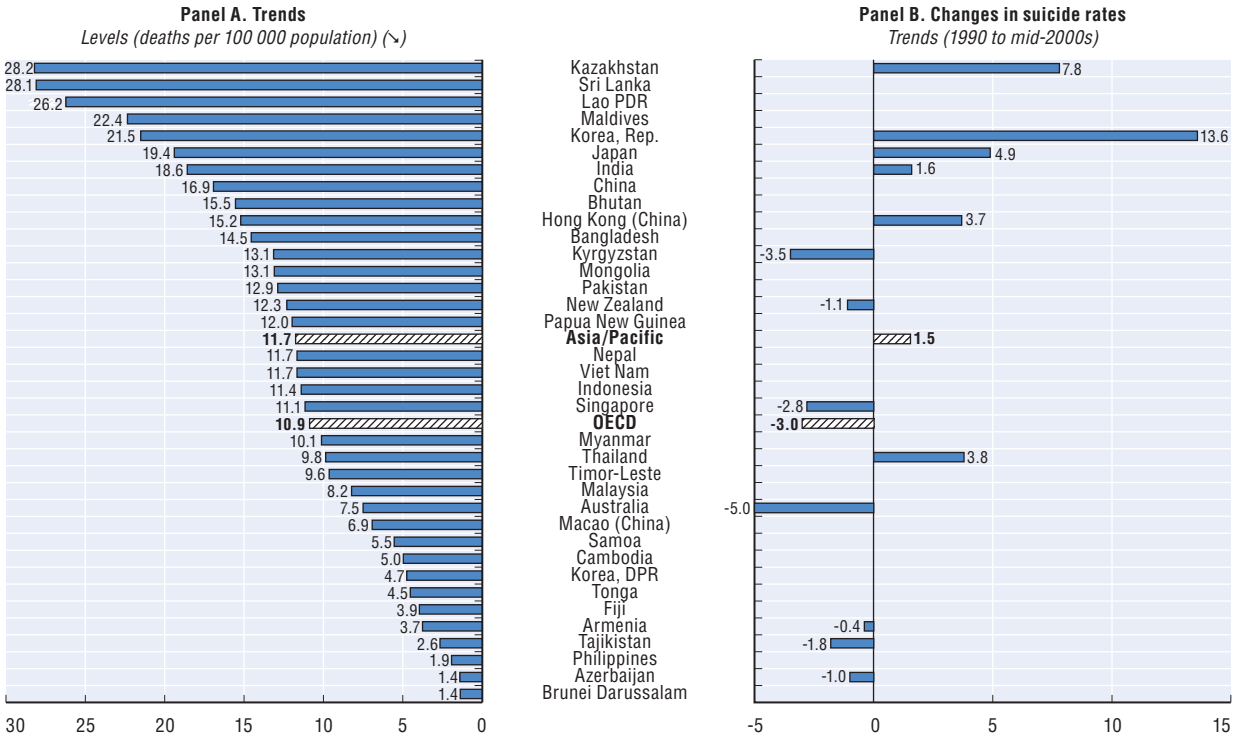
Suicide rates are based on the crude number of deaths caused by suicide divided by the total population. Rates are presented per 100 000 persons. The comparability of suicide data between countries is affected by a number of reporting criteria. Caution is thus required in interpreting variations across countries. Suicide rates disaggregated by gender and trends in suicide rates for Asia/Pacific OECD countries and for the OECD average come from the *WHO Mortality Database*. These rates have been age-standardised to the 1980 OECD population, to remove variations arising from differences in age structures across countries and over time within each country. Data for Macao (China) come from the *WHO Mortality Database*, but the data has not been age-standardised. Data for Hong Kong Special Administrative Region comes from a country report to the WHO (*www.who.int/mental_health/prevention/suicide/country_reports/en/ind ex.html*). Data for the other Asia/Pacific countries and economies are from the *WHO Global Burden of Disease Database* that draws on a wide range of data sources (*www.who.int/healthinfo/global_burden_disease/estimates_country/en/index.html*). The latest assessment of GBD is for 2004. Age-standardised death rates were used. However, information on the population year used for the standardisation is missing. Data on trends for the non-OECD Asia/Pacific countries and economies come from country reports to the WHO. For China, data on trends and on age disaggregation come respectively from Yip *et al.* (2005) and from a country report to the WHO. For the age disaggregation, data for all countries except China come from the *WHO Mortality Database*.

Further reading

Gunnell, D., M. Eddleston, M.R. Phillips and F. Konradsen (2007), "The Global Distribution of Fatal Pesticide Self-poisoning: Systematic Review", *BMC Public Health*, Vol. 7, No. 357.

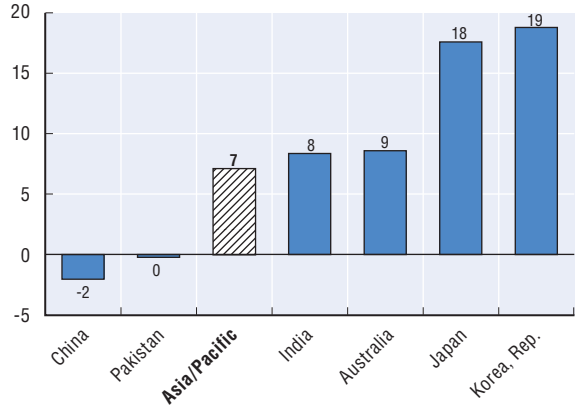
Yip, P., K.Y. Liu, Jianping Hu and X.M. Song (2005), "Suicide Rates in China During a Decade of Rapid Changes", *Social Psychiatry and Psychiatric Epidemiology,* Vol. 40, pp. 792-798.

CO4.1. **Suicide rates and variation in suicide rates**



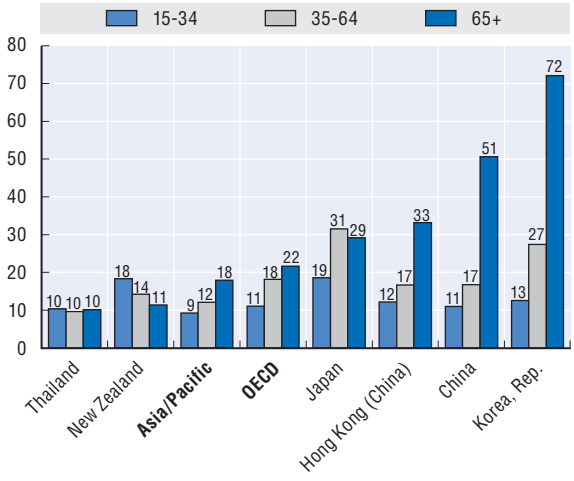
CO4.2. **Men commit suicide more than women**

Difference in suicide rates between men and women in selected countries (per 100 000 population)



CO4.3. **Suicide rates are highest among older people**

Suicide rates (deaths per 100 000 population) by age category in selected countries and economies



Source: OECD Health Data 2010; for non-OECD: WHO, country reports: *www.who.int/mental_health/prevention/suicide/country_reports/en/index.html*; Macao (China): data from WHO Statistical Information System (WHOSIS): *http://apps.who.int/whosis/database/mort/table1.cfm*.

StatLink http://dx.doi.org/10.1787/888932546604

CO5. Voting

A high voter turnout is a sign that a country's political system enjoys a strong degree of participation. While low voter turnout might reflect satisfaction with the country's management, it also implies that the political system reflects the will of a limited number of citizens. A number of countries in the region do not choose to hold democratic elections and thus cannot be included for consideration.

Voters turnout rates vary hugely across the region (Panel A, CO5.1). Over nine in every ten people turn out to vote in the Lao People's Democratic Republic, Viet Nam, Australia (where voting is a legal obligation) and Singapore, compared to fewer than one in every two people in the Republic of Korea and Pakistan, the two lowest turnouts in the region. In all other countries for which there is data on voting turnout in parliamentary elections, more than half the eligible population vote.

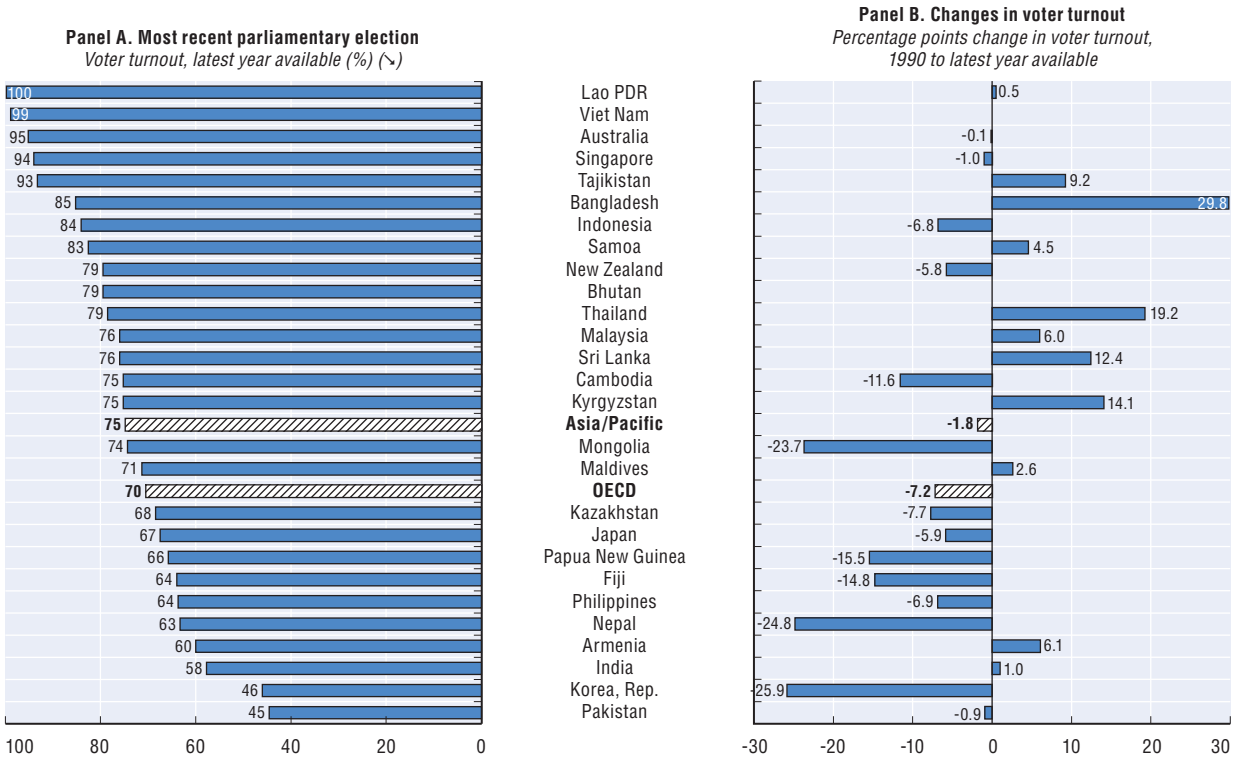
Voter turnout has generally declined in most countries in the last generation (Panel B, CO5.1). The pattern of voting decline has been uneven and far from universal. Nepal, the Republic of Korea and Mongolia have had declines on the order of one-fifth to one-quarter of the voting population. However, over one-third of countries have actually experienced rises in voter turnout, in some cases considerable ones. In Bangladesh, the rise has been by nearly one-third of the voting population. Large rises in turnout over the last generation were also a feature of the electorates in Thailand, Kyrgyzstan and Sri Lanka.

Voter turnout is positively associated with pro-social behaviour (CO5.2). One could look upon voting – political participation – as an additional sort of pro-social behaviour. Pro-social behaviour is measured in terms of the Giving Index (CO3), which incorporates information on helping a stranger and giving time or money. The observed relationship is, however, relatively moderate. Countries with high voter turnout show a wide range of other pro-social behaviour. For example, pro-social behaviour is very high in the Lao People's Democratic Republic, as is voter turnout. High Laotian voter turnout is shared with neighbouring Viet Nam, where pro-social behaviour is notably low.

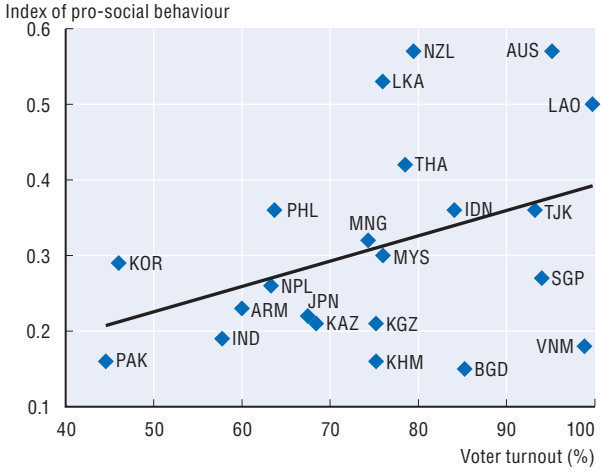
Definition and measurement

Voting in national parliamentary elections is one indicator of people's participation in their community's national life. The indicator used here to measure the participation of individuals in the electoral process is the "voter turnout", *i.e.* the number of individuals who cast a ballot during an election as a share of the population of voting age – generally the population aged 18 or more – as available from administrative records of member countries. Different types of elections occur in different countries according to their institutional structure and different geographical jurisdictions. For some countries, it should be noted, turnout for presidential elections and regional elections may be higher than for national parliamentary elections, perhaps because those elected through these ballots are constitutionally more important for how those countries are run. Data about voter turnout are extracted from the international database organised by the *Institute for Democratic and Electoral Assistance* (IDEA).

CO5.1. **Voting**



CO5.2. **Voting is positively associated with other pro-social behaviour**



Source: International database organised by the Institute for Democratic and Electoral Assistance (IDEA) *www.idea.int/*. Data on pro-social behaviour come from the World Giving Index, and are collected by Gallup.

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