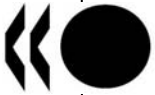


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INCOME INEQUALITY, POVERTY AND SOCIAL SPENDING IN JAPAN

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ABSTRACT/RÉSUMÉ

Income inequality, poverty and social spending in Japan

Income inequality and relative poverty among the working-age population in Japan have risen to levels above the OECD average. This trend is partially explained by labour market dualism, with an increasing proportion of non-regular workers who are paid significantly less than regular workers, as well as by other factors, including the ageing of the workforce. Social spending as a share of GDP has been expanding in the context of population ageing, although it remains below the OECD average and the proportion received by low-income households is small. Consequently, the impact of social spending on inequality and poverty is weak compared to other OECD countries and inadequate to offset the deterioration in market income. The scope for increasing social spending is constrained by the fiscal situation. Instead, reversing the upward trend in inequality and poverty requires reforms to reduce labour market dualism and better target social spending on low-income households, particularly single parents.

This Working Paper relates to the 2006 *OECD Economic Survey of Japan* (www.oecd.org/eco/surveys/japan).

JEL classification: I32, I38.

Keywords: Income inequality, income distribution, absolute poverty, relative poverty, social spending, Gini coefficient, non-regular workers, labour market dualism, employment protection, Japan.

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Inégalité des revenus, pauvreté et dépenses sociales au Japon

L'inégalité des revenus et la pauvreté relative parmi la population active ont progressé au Japon jusqu'à des niveaux supérieurs à la moyenne de l'OCDE. Cette évolution s'explique en partie par le dualisme du marché du travail - la proportion croissante de travailleurs non réguliers, qui sont rémunérés sensiblement moins que les travailleurs réguliers - ainsi que par d'autres facteurs comme le vieillissement de la population active. Les dépenses sociales en pourcentage du PIB se sont accrues du fait du vieillissement de la population, mais restent inférieures à la moyenne de l'OCDE, alors que le pourcentage de ces dépenses allant aux ménages à bas revenu est faible. L'incidence des dépenses sociales sur l'inégalité et la pauvreté est donc peu marquée, par rapport à ce qui est le cas dans les autres pays de l'OCDE, et insuffisante pour compenser la dégradation du revenu marchand. Les possibilités d'augmentation des dépenses sociales sont limitées par la situation budgétaire. Pour inverser la tendance à l'aggravation de l'inégalité et de la pauvreté, il faudrait plutôt mettre en œuvre des réformes visant à réduire le dualisme du marché du travail et à mieux cibler les dépenses sociales sur les ménages à faible revenu, en particulier les pères ou mères célibataires.

Ce Document de travail se rapporte à l'Étude économique de l'OCDE du Japon, 2006 (www.oecd.org/eco/etudes/japon).

Classification JEL : I32, I38.

Mots clés: Inégalité des revenus, distribution des revenus, pauvreté absolue, pauvreté relative, dépenses sociales, coefficient de Gini, travailleurs non réguliers, dualisme du marché du travail, protection de l'emploi, protection, Japon.

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INCOME INEQUALITY, POVERTY AND SOCIAL SPENDING IN JAPAN

Randall S. Jones¹

1. A relatively equal income distribution has been a hallmark of postwar economic development in Japan. Around three-quarters of the population identify themselves as middle class.² Lifetime employment and seniority-based wages, in which age and job tenure largely determine employee compensation, enhanced equality. A traditional support system based on families and firms has partially fulfilled the role played by the state in many other OECD countries. This approach has limited the growth of government spending and kept the tax burden at a moderate level.
2. However, there are a number of negative trends in income distribution and poverty:
 - According to the *Survey on the Redistribution of Income* by the Ministry of Health, Labour and Welfare (MHLW), the Gini coefficient for disposable income increased by 11% between the mid-1980s and 2000. The OECD's comparative analysis of member countries found a similar trend for Japan. This report, which is based on the MHLW's *Comprehensive Survey on Living Conditions*,³ shows a 13% rise between the mid-1980s and 2000, compared to an OECD average of 7%.⁴ Consequently, the level of income inequality in Japan was slightly above the OECD average in 2000 (see Table 3 below).⁵

-
1. Randall S. Jones is head of the Japan/Korea Desk in the Economics Department of the OECD. This paper is based largely on material from the *OECD Economic Survey of Japan* published in July 2006 under the authority of the Economic and Development Review Committee (EDRC). The authors would like to thank Andrew Dean, Val Koromzay, Willi Leibfritz and Tadashi Yokoyama for valuable comments on earlier drafts. Special thanks go to Roselyne Jamin for technical assistance and to Nadine Dufour and Lillie Kee for technical preparation.
 2. See, for example, *Asia's New Giant*, Chapter 1. This view of Japan was re-enforced by the *OECD Economic Outlook* (1976), which placed Japan with Norway and Sweden in the group of countries with the most equally distributed income. However, it should be noted that the data, based on the National Survey of Family Income and Expenditure, excluded agricultural households and under-reported property income and social security, making international comparisons of inequality difficult (see Bauer and Mason, 1992).
 3. Two other surveys by the Japanese government also show increases in the Gini coefficient over the same period. The *Family Income and Expenditure Survey* reports a rise of 6% between the average of 1984-86 and the average of 2002-04. The *National Survey of Family Income* shows an 8% increase between 1984 and 1999 (the latest year available). The various income surveys are discussed in Annex 1.
 4. For the 23 countries for which data are available. The OECD report (Förster and Mira d'Ercole, 2005) is based on data drawn from national sources on a standardised basis that adjusts household income by household size and uses common methodology and definitions to overcome many of the issues that limit cross-country and inter-temporal comparisons of income distribution and poverty (see Annex 1 for an explanation of the data and concepts used in this paper).
 5. The estimate of the Gini coefficient from the *Survey on the Redistribution on Income* -- at 38.1 in 1999 -- suggests a much higher level of inequality than the estimate of 31.4 reported in the OECD's comparative analysis. The reason for the difference is that the former is not adjusted for family size (see Annex 1).

- The relatively large share of elderly in Japan and rapid population ageing partially explain the high and rising level of inequality. However, the Gini coefficient for the 18 to 65 age group shows the same trend as the coefficient for the entire population (see Table 3 below).
- Changes affecting those at the lower end of the income distribution are of particular concern. While the top income quintile's share of disposable income increased between 1985 and 2000, the share of the bottom quintile declined. Consequently, the ratio between the top and bottom quintiles rose from 4.4 in the mid-1980s to 5.6 in 2000, well above the OECD average of 4.5.⁶
- The proportion of the population living in absolute poverty⁷ increased by 5 percentage points between the mid-1980s and 2000 in Japan, the only OECD country to record an increase.
- The proportion of the population in relative poverty, defined as less than one-half of the median household disposable income, surpassed 15% in 2000 in Japan, the fifth highest in the OECD area and well above the average of 10%. Relative poverty is also high among the working-age population (see Table 9 below).
- The average income of those in relative poverty is low compared to other OECD countries. Consequently, the amount of income transfers needed to raise all those in poverty up to the 50% threshold in Japan - the poverty gap - is the third largest in the OECD area.

In contrast to income distribution, the distribution of wealth has become more equal since the early 1990s following the collapse of the asset price bubble.⁸ However, international comparisons of the distribution of wealth are problematic due to data issues. Finally, it should be noted that the international comparisons calculated by the OECD end in the year 2000.⁹ The trends in inequality and poverty discussed in this paper, therefore, should not be attributed to the policies of the current government, which took office in 2001, but instead reflect more long-run developments.

3. Rising income inequality and relative poverty may be a concern to policymakers when they exacerbate the social exclusion of poorer persons, with negative consequences for the well being of those individuals as well as for society as a whole.¹⁰ Moreover, it may increase demands for hikes in public

6. This paper focuses on the Gini coefficient, which provides a measure of inequality that is less sensitive to changes in the two extremes of the income distribution. Two other measures of income concentration -- mean-log deviations and squared coefficient of variation -- also report an increase in income inequality in Japan during the latter half of the 1990s (Förster and Mira d'Ercole, 2005).

7. Defined as an income less than one-half of the median disposable income in 1985 and adjusted for price increases in subsequent years. However, there are a number of difficult statistical issues in calculating an absolute poverty threshold (see Annex 1). Consequently, this paper will focus on relative poverty.

8. The Gini coefficient on the distribution of housing and residential land fell from 68 in 1989 to 57 in 1999.

9. Japanese surveys of household income show different results for trends in inequality since 2000. The *Survey on the Redistribution of Income*, which is drawn from the same sample on which the OECD's international comparison is based, reports that the Gini coefficient in 2002 (the latest year available) was unchanged from its 1999 level of 38.1. The *National Survey of Family Income and Expenditure* reports an increase of 2% between 1999 and 2004. However, the *Family Income and Expenditure Survey* showed a 5% decline in the Gini coefficient over that period.

10. On the other hand, larger income inequalities may boost economic growth by raising incentives to work, save and invest. OECD analysis of this issue found some evidence that a wider income distribution is positive for growth. However, it explains very little of the differences in growth rates across countries and over time (Arjona *et al.*, 2001).

expenditure to counter rising poverty, resulting in tax increases that have negative implications for growth. This paper begins by examining the factors responsible for the increasing inequality in market income in Japan, followed by an overview of the impact of social spending on income distribution. The third section discusses the issue of relative poverty. The paper concludes with recommendations to counter the upward trend in income inequality and poverty.

Factors responsible for the rising level of inequality in market income in Japan

4. Between the mid-1980s and 2000, the distribution of market income became significantly less even in Japan. The Gini coefficient of market income inequality for the total population rose by 9.4 percentage points over that period, a large increase compared to the OECD average of 4.3 points (Table 1).¹¹ The deceleration of economic growth following the collapse of the bubble and the resulting rise in the unemployment rate may have played a role.¹² However, the trend toward greater market income inequality was already evident in the second half of the 1980s, a period of rapid growth.¹³

5. Population ageing has contributed to higher inequality in market income through three channels. *First*, the elderly have less income than the working-age population. The increase in the share of elderly from 10% of the Japanese population in the mid-1980s to 17% in 2000 raised the level of inequality because of larger between-group income differences. *Second*, the level of inequality of market income among those over age 65 is higher than for the 18 to 65 age group, reflecting the fact that a smaller portion of the over 65 age group is in the labour force. Indeed, the Gini coefficient for the over 65 age group in Japan in the mid-1980s was 47.3 compared to 30.9 for the working-age population (Table 1). The rising share of elderly in the population thus boosted the level of inequality of market income for the total population. *Third*, the degree of market income inequality among the elderly in Japan has risen sharply, as shown by the 15.6 percentage-point increase in the Gini coefficient for the over 65 age group since the mid-1980s, moving it toward the OECD average. The rising trend is partly explained by changes in living arrangements: the proportion of the elderly living alone or with a spouse rose from 32% in 1985 to 47% in 2000, increasing the number of households with older persons reporting low incomes.

6. To the extent that higher market income inequality reflects population ageing, the observed increase may be less of a concern as it does not necessarily imply higher inequality in disposable income or greater relative poverty, given the importance of pension benefits (see below). Moreover, the elderly have generally accumulated significant wealth, in part to finance their retirement.¹⁴ Data on poverty and disposable income do not take account of dis-saving by older persons. Given the fact that income distribution and poverty statistics for the elderly are affected by changes in living arrangements and dis-saving, this paper focuses primarily on the working-age population, which also experienced a significant rise in inequality. Indeed, the Gini coefficient of market income for the 18 to 65 age group rose

11. Nevertheless, it should be noted that the level of inequality of market income in Japan in 2000, at 41.0, was below the OECD average of 44.3.

12. The unemployment rate in the OECD area is positively correlated with the Gini coefficient, suggesting that higher unemployment increases inequality (Burniaux, Padrini and Brandt, 2006). However, among the five OECD countries that experienced rising unemployment in the second half of the 1990s, only two (Japan and the Czech Republic) recorded increasing inequality in labour earnings.

13. Indeed, the Gini coefficient for the total population increased by 5.3 percentage points between 1985 and 1994, when real output was growing at an average annual rate of 3.2%, and it rose by 4.1 points between 1994 and 2000 when real output was growing at a 1.2% rate.

14. In the mid-1990s, Japanese households headed by a person aged 67 or above had a stock of marketable assets of around nine times their annual disposable income in the case of singles and 3.6 times higher in the case of couples (Disney *et al.*, 1998). In both cases, the wealth to income ratios were more than double the amount for a household headed by someone below the age of 55.

by 5.2 percentage points between the mid-1980s and 2000, bringing it closer to the OECD average (Table 1). In particular, there was a marked difference between trends in Japan and those in most other OECD countries during the latter half of the 1990s. While the average OECD Gini coefficient was almost unchanged, the coefficient for Japan increased by 2.3 percentage points, the third largest increase in the OECD area.

Table 1. Trends in the distribution of market income in OECD countries
Gini coefficient (multiplied by 100)¹

| | Level of the Gini coefficient | | | Percentage-point change in the level | | |
|-------------------------------------|-------------------------------|-----------|-------------|--------------------------------------|-------------------|-------------------|
| | Mid-1980s | Mid-1990s | Around 2000 | Mid-1980s to mid-1990s | Mid-1990s to 2000 | Mid-1980s to 2000 |
| A. Japan | | | | | | |
| Total population | 31.7 | 36.9 | 41.0 | 5.3 | 4.1 | 9.4 |
| Working-age population ² | 30.9 | 33.8 | 36.2 | 2.9 | 2.3 | 5.2 |
| Elderly population | 47.3 | 57.5 | 62.9 | 10.2 | 5.4 | 15.6 |
| B. OECD average³ | | | | | | |
| Total population | 40.1 | 44.2 | 44.3 | 4.1 | 0.2 | 4.3 |
| Working-age population ² | 35.4 | 39.2 | 39.3 | 3.8 | 0.1 | 3.9 |
| Elderly population | 63.9 | 65.5 | 65.1 | 1.6 | -0.4 | 1.2 |

1. The Gini coefficient is defined as the area between the Lorenz curve (which plots cumulative shares of the population, from poorest to richest, against the cumulative share of income that they receive) and the 45-degree line, taken as a ratio of the whole triangle. The values, which range from 0 in the case of perfect equality and 1 in the case of perfect inequality, are multiplied by 100 to give a range of 0 to 100 for the Gini coefficient.

2. The 18 to 65 age group.

3. For the following 14 countries: Australia, Canada, Denmark, Finland, France, Germany (old Länder only), Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, United Kingdom and the United States.

Source: Förster and Mira d'Ercole (2005).

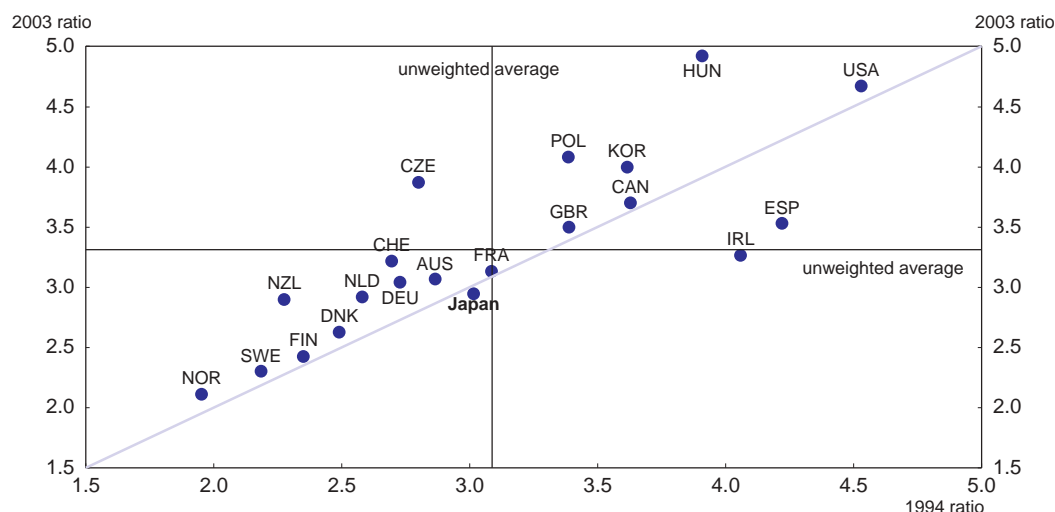
7. The relatively large increase in market income inequality among the working-age population during the latter half of the 1990s is somewhat surprising given the significant decline in capital income, which is marked by the highest degree of inequality among income components.¹⁵ This suggests that rising inequality of labour earnings, which account for about 80% of households' market income, was the key factor. Indeed, the earnings of those in the bottom income quartile have fallen as a share of total earnings since the mid-1980s (Förster and Mira d'Ercole).¹⁶ However, growing market income inequality cannot be explained by the variation in wages paid to full-time workers, as Japan was one of only three OECD countries to record a decline in wage inequality between 1994 and 2003 (Figure 1). This finding is supported by the fact that the Gini coefficient of earnings of regular workers, who are primarily full-time workers, has remained fairly constant since 1987. In addition, the ratio of wages of full-time workers in the 90th and 10th percentiles in Japan in 2003 was below the OECD average, perhaps reflecting the impact of the seniority-based wage system, which limits differences between employees of similar ages and tenure. Moreover, the wage gap between blue and white-collar employees is small and the wage premium for

15. Capital income declined from 7.2% of household disposable income in 1994 to 3.7% in 2000, reflecting falling interest rates and asset prices.

16. The minimum wage does not appear to be responsible for increasing inequality. The statutory minimum wage rose slightly from 32% of the average hourly wage in 1995 (all workers at firms with 30 or more workers) to 34% in 2004.

higher education is low.¹⁷ The increasing share of the labour force above the age of 50 is another factor raising inequality, given the fact that the distribution of wages is more unequal for older workers.¹⁸

**Figure 1. Gross earnings inequality across OECD countries¹
1994-2003(2)**



1. As measured by the ratio of the 90th to 10th percentile of the earnings of full-time workers. Countries located below the 45-degree line experienced a decline in gross earnings inequality between 1994 and 2003.
2. 1994-1999 for the Netherlands, 1994-2000 for Hungary and Ireland, 1994-2002 for France, Germany, Korea and Poland, 1995-2002 for Spain, 1996-2003 for Czech Republic and Denmark, 1997-2002 for Norway and 1997-2003 for Canada.

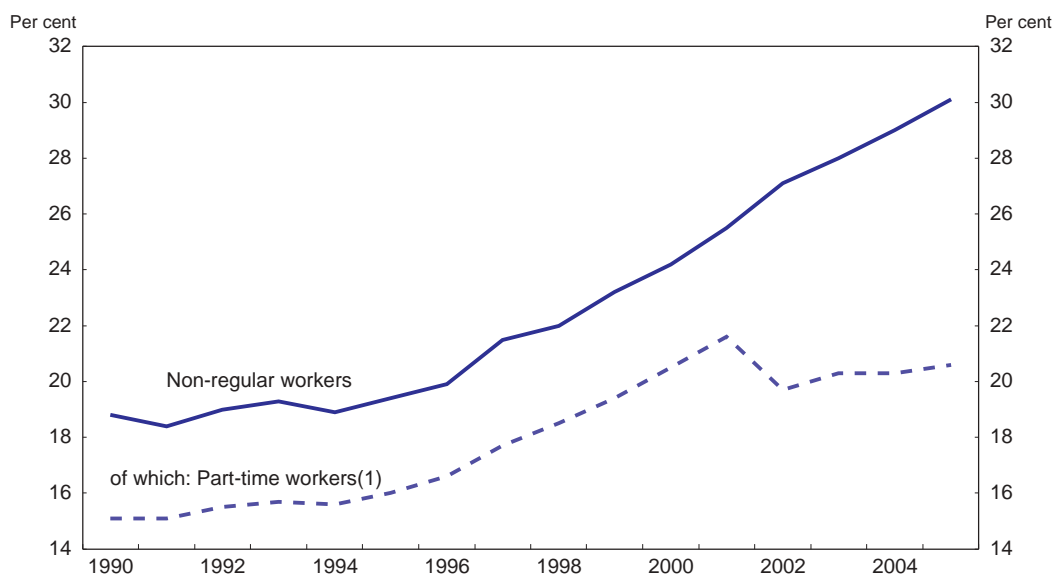
Source: *OECD Employment Outlook* (2004).

8. Instead, the growing proportion of non-regular workers is a key explanation of increased inequality in market income in Japan. Non-regular workers include part-time and dispatched workers (employed by temporary worker agencies) and temporary and short-term contract employees.¹⁹ On an hourly basis, part-time workers - who account for about two-thirds of non-regular workers - were paid only 40% as much as full-time workers in 2003.²⁰ Consequently, the increase in the share of non-regular workers from 19% of employees in 1994 to 30% in 2005 (Figure 2) has significantly raised the overall level of inequality in Japan.²¹ Another study found that the wage differential between regular and non-

17. Men with a university degree earned 20% more on average than those with an upper secondary education.
18. In 1989, the Gini coefficient ranged between 21 and 25 for workers in the 25 to 50 age group, compared to 27 to 34 for those between 50 and 65. The increase in the proportion of the labour force between the ages of 50 to 65 - from 30% in 1989 to 36% in 2004 - lifted the Gini coefficient by about 1%, assuming that the Gini coefficients for each age group remained at their 1989 level. The Gini coefficient for the working-age population increased 17% between the mid-1980s and 2000.
19. There is no legal distinction between regular and non-regular workers. The categories of dispatched workers, part-time workers and temporary employees are legally defined.
20. Part-time workers are defined as those working fewer hours on a daily or weekly basis than full-time employees in the same workplace. Workers can be classified as part-timers regardless of the length of the term of contract and whether it is fixed or not. Both the full-time and part-time categories include those employed on fixed-term or indefinite contracts.
21. For example, if all regular workers were paid an identical wage and all non-regular workers were paid 60% less, the increase in the proportion of non-regular workers from 19% to 30% would boost the variance of wage payments by about 31%.

regular workers has risen since the early 1990s (Higuchi and the Policy Research Institute, MOF, 2003). Moreover, the level of inequality among non-regular workers is relatively high – with a Gini coefficient of 48 in 2002 compared to 28 for regular workers - and has been increasing. Part-time workers earn on average only 40% as much per hour as full-time workers, a gap which appears too large to be explained by productivity differences. There appears to be a significant degree of wage discrimination, as the 60% gap between the average hourly wages of full and part-time workers is unlikely to be matched by the difference in productivity. In addition to the equity implications of greater labour market dualism, non-regular workers receive less on-the-job training, thus limiting their human capital and Japan's growth potential.

Figure 2. The share of non-regular workers is rising
As percentage of total employed persons



1. The significant fall in the number of part-time workers in 2002 and the rise in the other categories is thought to be due to a change in the questionnaire.

Source: Ministry of Internal Affairs and Communications.

9. Non-regular workers are a diverse group that includes young people on temporary contracts, married women working part-time and older persons who are re-hired by their former companies on fixed-term contracts. Non-regular employment provides opportunities for people to work in flexible and diverse ways that match their lifestyle. Their average age is three to four years older than regular workers, although a quarter of employees in the 20 to 24 age group are non-regular workers (Table 2). There are twice as many females employed as non-regular workers as males. Consequently, less than half of women employees are classified as regular workers. Non-regular workers also tend to be less educated, as only 12% have a university degree compared to 31% for regular workers, and are most prevalent in the service sector. Likewise, they are concentrated in smaller firms, where they are generally paid on an hourly or daily basis. Finally, non-regular employees work 30 hours a week on average compared to 40 hours for regular workers, although nearly half work more than 35 hours a week and are thus classified as full-time workers.

10. The lower wages paid to non-regular workers makes them attractive to firms, particularly since the economic malaise that began in the early 1990s. In addition, many are not included in enterprise-based social insurance schemes. Indeed, only about one-half of non-regular workers are covered by the Employees' Pension Scheme and health insurance and about two-thirds by employment insurance

Table 2. Comparison of major characteristics of regular and non-regular workers¹
In per cent unless indicated otherwise

| | | | |
|---|---------------------------|---------------------------|--------------------------------------|
| A. Age | Average-male (years) | Average-female (years) | Percentage under age 30 ² |
| Regular workers | 39.6 | 37.0 | 23.0 |
| Non-regular workers | 43.2 | 41.0 | 25.1 |
| B. Gender | Male | Female | Females by employee status |
| Regular workers | 47.3 | 18.2 | 44.4 |
| Non-regular workers | 11.8 | 22.7 | 55.6 |
| C. Education ³ | Lower secondary | Upper secondary | University |
| Regular workers | 2.4 | 42.2 | 31.4 |
| Non-regular workers | 7.2 | 55.8 | 12.1 |
| D. Occupation | Clerical workers | Service workers | Professional/technical workers |
| Regular workers | 44.7 | 6.2 | 13.4 |
| Non-regular workers | 25.5 | 24.0 | 13.2 |
| E. Sector ⁴ | Manufacturing | Services | Construction |
| Regular workers | 76.7 | 58.7 | 85.6 |
| Non-regular workers | 23.3 | 41.3 | 14.4 |
| F. By size of company ⁴ (number of employees) | More than 1 000 | 30 to 999 | 5 to 29 |
| Regular workers | 81.0 | 66.6 | 62.1 |
| Non-regular workers | 19.0 | 33.4 | 37.9 |
| G. Wage payment system | By hour | By day | By month or year |
| Regular workers | 2.3 | 4.9 | 89.7 |
| Non-regular workers | 66.4 | 8.7 | 21.3 |
| H. Working time | Average hours per week | Percentage below 35 hours | Average days per week |
| Regular workers | 40.4 | 0.6 | 5.3 |
| Non-regular workers | 30.3 | 53.0 | 4.8 |
| I. Coverage by social insurance | Employees' Pension Scheme | Health insurance | Employment insurance |
| Regular workers | 99.3 | 99.6 | 99.4 |
| Non-regular workers | 47.1 | 49.1 | 63.0 |
| J. Tenure | Less than 1 year | 1 to 10 years | More than 10 years |
| Regular workers | 3.9 | 45.8 | 49.4 |
| Non-regular workers | 21.5 | 65.5 | 13.0 |
| K. Main source of income | Own | Spouse | Other family |
| Regular workers | 77.9 | 15.0 | 5.9 |
| Non-regular workers | 43.3 | 43.8 | 10.8 |

1. Non-regular workers include part-time workers, temporary workers, dispatched workers, workers on loan from other companies, and contract workers.

2. For non-regular workers, 31.4% were over age 50 compared to 18.5% of regular workers.

3. Highest level of education attained.

4. Figures show the percentage of regular and non-regular employees by sector and size of company.

Source: Ministry of Health, Labour and Welfare, "General Survey on Diversified Types of Employment, 2003".

(Table 2, Panel I). The number not covered includes those who evade participation in these insurance systems even though they are legally obliged to join. This results in an additional 13% saving in non-wage

costs for firms.²² In a government survey that asked management why they hire non-regular workers, around half of firms cited reducing wage costs while nearly a quarter mentioned cutting non-wage costs (see the 2005 *OECD Economic Survey of Japan*).

11. Another important motivation for hiring non-regular workers is to enhance employment flexibility. In the survey cited above, more than a quarter of firms employing non-regular workers did so in order to cope with daily or weekly fluctuations in demand and to be able to adjust the number of employees to changes in the business cycle. Not surprisingly, 22% of non-regular workers have less than one year of tenure and only 13% have more than ten years (Table 2, Panel J). In contrast, one-half of regular workers have been at their current firm for at least a decade. The flexibility afforded by using non-regular workers is needed to compensate for the high level of employment protection provided to regular workers. Indeed, Japan is ranked tenth out of 28 OECD countries in terms of the strictness of employment protection for regular workers, including voluntary practices by enterprises (OECD, 2004).²³ As for restrictions on dismissal, judicial precedent was incorporated in the labour law in 2003. Any dismissal of workers that is not objectively justifiable and that is not considered to be acceptable by society's standards shall be deemed an abuse of power and therefore invalid. In addition, court cases have set four conditions that a firm must meet in the case of collective dismissals. *First*, it must show the economic necessity of reducing its workforce. *Second*, it must prove that there are no alternative measures that could achieve the necessary reduction. *Third*, it must demonstrate that the process of selecting employees for dismissal is reasonable and objective. *Fourth*, it must discuss the dismissals with the workers' union. Given these conditions, enterprises do not know beforehand if their efforts to rationalise their workforce will be accepted by the courts.²⁴ Current efforts to incorporate judicial precedents into the law will help increase transparency.

12. The number of regular workers increased in 2005 for the first time in a decade. However, the job-offer ratio for full-time jobs was 0.65 in December 2005 compared to 1.45 for part-time jobs, indicating a continued preference for non-regular workers. There is thus a risk that the proportion of non-regular workers may ratchet up during the next economic downturn. Moreover, there are obstacles hindering the transition from non-regular to regular-worker status. Not surprisingly, 76% of the men and 69% of the women who are non-regular workers hope to become regular workers, according to a 2003 survey by the government. However, another government survey reported that only 23% of part-time workers who changed jobs in 2005 were hired as regular workers, compared to 31% in 1990.

The impact of tax and social spending policies on income inequality

13. As in other OECD countries, government policies in Japan play a significant role in reducing disparities in the distribution of market income. Consequently, measures of inequality are significantly

22. Employees who work less than three-quarters of the hours worked by regular employees (on a daily, weekly or monthly basis) are exempted from pension and health insurance contributions. Employees working less than one year or less than 20 hours a week are exempted from employment insurance. Such thresholds diminish the supply of labour as some employees work part-time to avoid having to make contributions to social insurance programmes.

23. Regression analysis using data from 19 OECD countries (including Japan) showed that employment protection increased inequality in some specifications of the equations (Burniaux, Padrini and Brandt, 2006).

24. Prior to 2003, the legal code did not specify any criteria for dismissing workers in principle. The labour law reform proposed by the government in 2003 restated that corporations have the right, in principle, to dismiss workers. However, this statement was eliminated from the bill due to resistance from opposition parties and labour unions. The new law states that collective dismissals should be consistent with "social common sense".

smaller for disposable income, with a Gini coefficient of 31.4 in 2000 for the entire population (Table 3), compared to 41.0 for market income (Table 1). The impact of tax and social spending policies in reducing

Table 3. Trends in the distribution of disposable income in OECD countries
Gini coefficient (multiplied by 100)

| A. Total population | | | | | | |
|----------------------------------|-------------|-------------|--------------------------------------|------------------------|-------------------|-------------------|
| Level of the Gini coefficient | | | Percentage-point change in the level | | | |
| | Mid-1980s | Mid-1990s | 2000 | Mid-1980s to mid-1990s | Mid-1990s to 2000 | Mid-1980s to 2000 |
| Australia | 31.2 | 30.5 | 30.5 | -0.7 | 0.0 | -0.7 |
| Austria | 23.6 | 23.8 | 25.2 | 0.2 | 1.4 | 1.6 |
| Canada | 29.0 | 28.3 | 30.1 | -0.7 | 1.8 | 1.1 |
| Czech Republic | 23.2 | 25.8 | 26.0 | 2.6 | 0.2 | 2.8 |
| Denmark | 22.9 | 21.3 | 22.5 | -1.6 | 1.2 | -0.4 |
| Finland | 20.7 | 22.8 | 26.1 | 2.1 | 3.3 | 5.4 |
| France | 27.5 | 27.8 | 27.3 | 0.3 | -0.5 | -0.2 |
| Germany ¹ | 26.3 | 27.7 | 27.5 | 1.4 | -0.2 | 1.2 |
| Greece | 33.6 | 33.6 | 34.5 | 0.0 | 0.0 | 0.9 |
| Hungary | 27.1 | 29.2 | 29.3 | 2.1 | 0.1 | 2.2 |
| Ireland | 33.1 | 32.5 | 30.4 | -0.6 | -2.1 | -2.7 |
| Italy | 30.6 | 34.8 | 34.7 | 4.2 | -0.1 | 4.1 |
| Japan | 27.8 | 29.5 | 31.4 | 1.7 | 1.9 | 3.6 |
| Luxembourg | 24.7 | 25.9 | 26.1 | 1.2 | 0.2 | 1.4 |
| Mexico | 43.9 | 50.8 | 46.7 | 6.9 | -4.1 | 2.8 |
| Netherlands | 23.4 | 25.5 | 25.1 | 2.1 | -0.4 | 1.7 |
| New Zealand | 27.0 | 33.1 | 33.7 | 6.1 | 0.6 | 6.7 |
| Norway | 23.4 | 25.6 | 26.1 | 2.2 | 0.5 | 2.7 |
| Portugal | 32.9 | 35.9 | 35.6 | 3.0 | -0.3 | 2.7 |
| Sweden | 19.8 | 21.2 | 24.3 | 1.4 | 3.1 | 4.5 |
| Turkey | 43.5 | 49.1 | 43.9 | 5.6 | -5.2 | 0.4 |
| United Kingdom | 28.7 | 31.2 | 32.6 | 2.5 | 1.4 | 3.9 |
| United States | 33.8 | 36.2 | 35.7 | 2.4 | -0.5 | 1.9 |
| Average ² | 28.6 | 30.5 | 30.7 | 1.9 | 0.1 | 2.1 |
| B. Working-age population | | | | | | |
| Australia | 30.4 | 29.4 | 29.5 | -1.0 | 0.1 | -0.9 |
| Canada | 28.6 | 28.7 | 30.5 | 0.0 | 1.8 | 1.9 |
| Denmark | 22.0 | 21.4 | 22.6 | -0.6 | 1.2 | 0.6 |
| Finland | 20.5 | 23.4 | 26.0 | 3.0 | 2.6 | 5.5 |
| France | 26.7 | 27.7 | 27.2 | 1.0 | -0.5 | 0.5 |
| Germany ¹ | 25.4 | 27.0 | 27.2 | 1.6 | 0.1 | 1.8 |
| Italy | 30.5 | 34.9 | 34.5 | 4.4 | -0.4 | 4.0 |
| Japan | 27.6 | 29.0 | 31.0 | 1.3 | 2.0 | 3.4 |
| Netherlands | 23.3 | 25.4 | 25.0 | 2.1 | -0.4 | 1.7 |
| New Zealand | 26.3 | 32.4 | 33.0 | 6.1 | 0.6 | 6.7 |
| Norway | 22.2 | 24.9 | 26.0 | 2.7 | 1.1 | 3.8 |
| Sweden | 22.4 | 21.6 | 24.2 | -0.8 | 2.6 | 1.8 |
| United Kingdom | 27.7 | 30.4 | 31.9 | 2.7 | 1.5 | 4.2 |
| United States | 32.6 | 35.1 | 34.6 | 2.6 | -0.5 | 2.0 |
| Average ² | 26.2 | 27.9 | 28.8 | 1.8 | 0.9 | 2.6 |

1. Old Länder.

2. Average of the 23 countries in Panel A and the 14 countries in Panel B. For information on the exact year for each country, see Förster and Mira d'Ercole (2005).

Source: Förster and Mira d'Ercole (2005).

inequality increased between the mid-1980s and 2000, although this was more than offset by the deterioration in market income distribution. As a result, the inequality of disposable income distribution has risen for both for the total and the working-age populations. This section looks at the impact of taxes and social spending on equality.

The effect of taxes

14. In the early 1990s, the tax system reduced the Gini coefficient for market income in Japan by about 3% (Table 4). However, tax reforms, which were aimed at increasing economic efficiency, have made the system less progressive. In 1986, the personal income tax had 15 rates, with a top rate of 70%. In 1999, it was reduced to only four, with a top rate of 37%. As a result of lower progressivity, the impact of the tax system on the Gini coefficient had fallen to less than 1% by 2002.

Table 4. The impact of taxes and public social spending on income distribution in Japan
Gini coefficient (multiplied by 100)

| Year | Market income | Disposable income | | Income distribution through taxes | | Income distribution through social spending | |
|------|----------------------|----------------------|-------------------------------|-----------------------------------|-------------------------------|---|-------------------------------|
| | Gini coefficient (A) | Gini coefficient (B) | Decline in per cent [(A-B)/A] | Gini coefficient (C) | Decline in per cent [(A-C)/A] | Gini coefficient (D) | Decline in per cent [(A-D)/A] |
| 1990 | 43.3 | 36.4 | -15.9 | 42.1 | -2.9 | 37.9 | -12.5 |
| 1993 | 43.9 | 36.5 | -17.0 | 42.6 | -3.2 | 38.1 | -13.2 |
| 1996 | 44.1 | 36.1 | -18.3 | 43.4 | -1.7 | 37.2 | -15.7 |
| 1999 | 47.2 | 38.1 | -19.2 | 46.6 | -1.3 | 39.1 | -17.1 |
| 2002 | 49.8 | 38.1 | -23.5 | 49.4 | -0.8 | 39.2 | -21.4 |

Source: Japanese Trade Union Confederation (RENGO), (2006).

The effect of social transfers

15. In contrast to the tax system, the impact of social spending on income distribution has been relatively large and increasing (Table 4). Indeed, social spending reduced the Gini coefficient on market income by 12.5% in 1990 and 21.4% in 2002, although this includes the impact of pension benefits. Social spending thus accounted for almost all of the 9.7 percentage-point gap between the Gini coefficients for market income and disposable income for the total population in 2000 (Table 5). However, the impact on the working-age population - a 5.2 percentage point reduction - is only about half of the OECD average. The small impact of benefits on the income distribution among the working-age population in Japan reflects three factors: *i*) social spending is relatively low; *ii*) social spending is concentrated on the elderly; and *iii*) the distribution of benefits between different income quintiles is less progressive in Japan.

Table 5. The impact of tax and social spending policies on income distribution in OECD countries

| | Percentage point difference in Gini coefficients between market and disposable income ¹ | | | Change in the impact of tax and benefit systems on the distribution of disposable income | | |
|-------------------------------------|--|-----------|-------------|--|-------------------|-------------------|
| | Mid-1980s | Mid-1990s | Around 2000 | Mid-1980s to mid-1990s | Mid-1990s to 2000 | Mid-1980s to 2000 |
| A. Japan | | | | | | |
| Total population | 3.9 | 7.4 | 9.7 | 3.5 | 2.2 | 5.8 |
| Working-age population ² | 3.3 | 4.9 | 5.2 | 1.6 | 0.3 | 1.9 |
| Elderly population | 13.3 | 23.5 | 29.1 | 10.2 | 5.7 | 15.9 |
| B. OECD average³ | | | | | | |
| Total population ⁴ | 13.4 | 15.9 | 15.2 | 2.6 | -0.7 | 1.9 |
| Working-age population ² | 9.2 | 11.2 | 10.5 | 2.0 | -0.7 | 1.3 |
| Elderly population | 37.2 | 39.2 | 38.1 | 2.0 | -1.1 | 0.9 |

1. The difference in the Gini coefficient (multiplied by 100) for market income (Table 1) and disposable income (Table 3).

2. The 18 to 65 age group.

3. Average of the 14 countries shown in Table 1.

4. The decline between the mid-1990s and 2000 reflects falling unemployment rates.

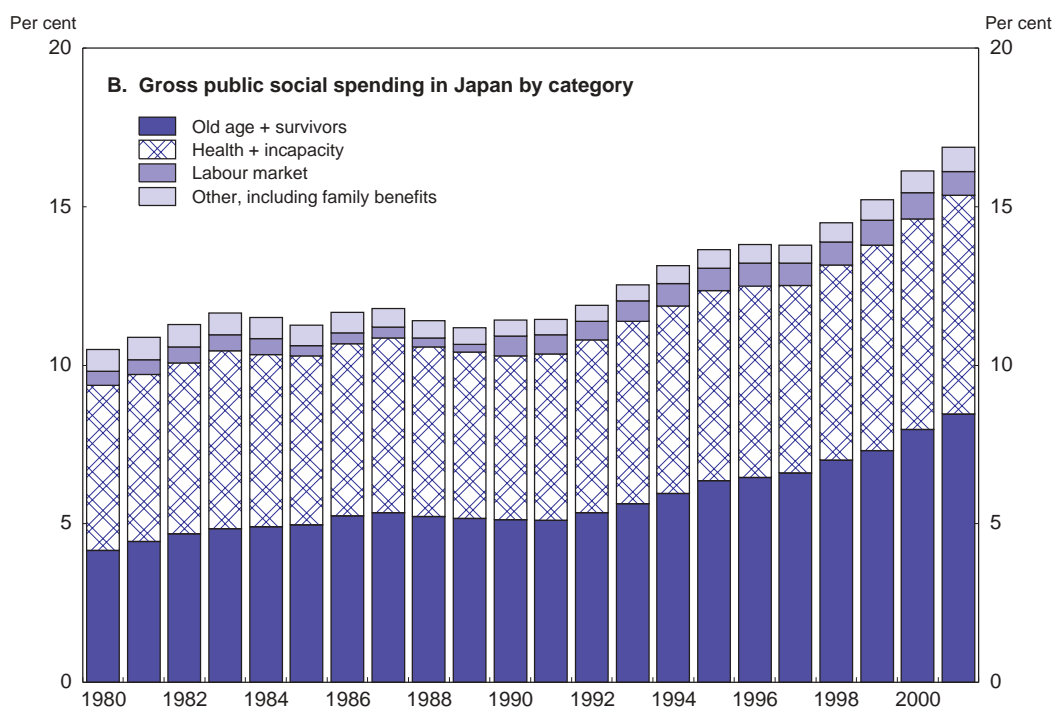
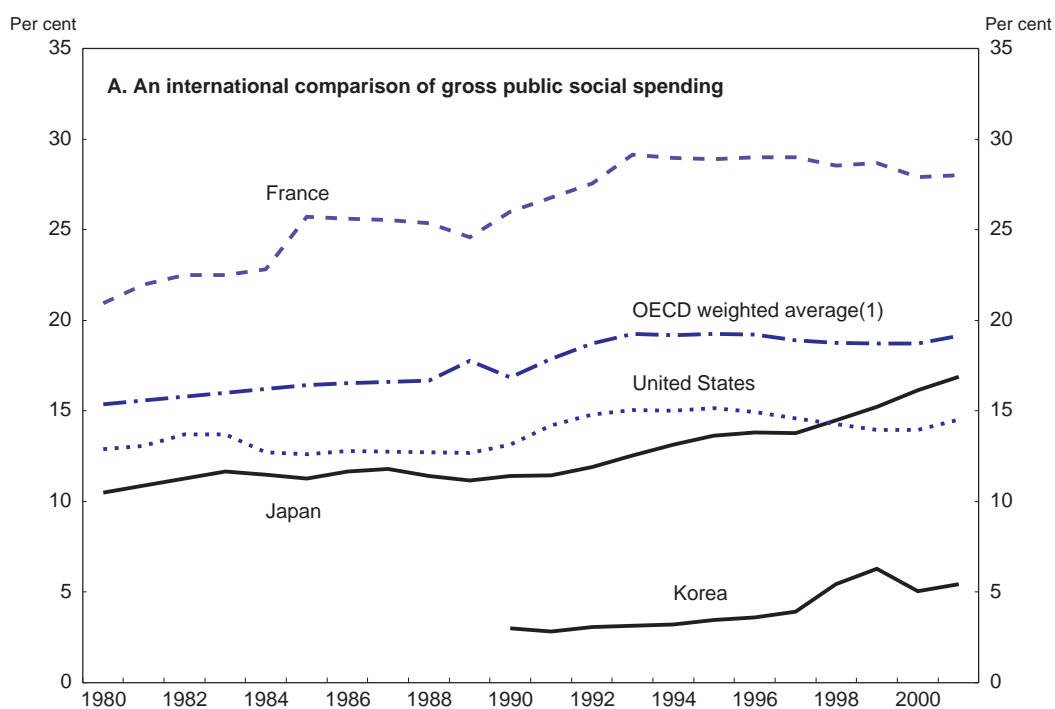
Source: Förster and Mira d'Ercole (2005).

The level of social spending is low

16. Gross public social expenditure, including public pensions, in Japan reached 16.9% of GDP in 2001 (Table 6). Despite an increasing trend during the 1990s (Figure 3), Japan ranked 25th among OECD countries, well below what would be expected given its level of income. However, gross public social spending does not provide a complete picture as it excludes the impact of the tax system on social expenditure (see Annex 1). Taking account of the tax system narrows the gap between Japan and other member countries by substantially reducing the OECD average (second column of Table 6). In addition, the provision of social expenditures is not restricted to government as most OECD countries require social spending by private-sector entities. Mandatory net private social spending in Japan amounted to 0.7% of GDP in 2001, slightly above the OECD average (third column).²⁵ According to the most complete measure - the sum of net public spending and mandatory net private spending (the fourth column) - social spending in Japan is slightly below the OECD average and 14th out of the 23 countries for which data are available.

25. Japan has a relatively high level of voluntary private net social spending, amounting to 2.5% of GDP, compared to the OECD average of 1.6%. The business sector has traditionally played an important role in social spending, providing family benefits and services such as housing, recreation and hospital care in an effort to attract and keep highly qualified employees. However, such spending appears concentrated in large, successful firms that tend to pay higher wages, thus mainly benefiting regular workers and limiting its impact on reducing income inequality and poverty.

Figure 3. Trends in public social spending
As per cent of GDP



1. The OECD average does not include the Czech Republic, Hungary, Iceland, Korea, Mexico, Poland, the Slovak Republic and Turkey due to insufficient data. The national data is converted to US dollars using 2001 PPPs. Source: OECD, Social Expenditure Database, 1980-2001, available at www.oecd.org/els/social/expenditure.

Table 6. Social spending in OECD countries
Per cent of GDP, including pensions, in 2001

| Countries ¹ | Gross public spending | Net public spending ² | Net mandatory private spending | Total net public and mandatory private spending |
|------------------------|-----------------------|----------------------------------|--------------------------------|---|
| Sweden | 29.8 | 23.7 | 0.3 | 24.0 |
| Denmark | 29.2 | 21.8 | 0.1 | 21.9 |
| France | 28.5 | 25.2 | 0.0 | 25.2 |
| Germany | 27.4 | 25.4 | 0.8 | 26.2 |
| Austria | 26.0 | 20.6 | 0.5 | 21.1 |
| Switzerland | 25.8 | .. | .. | .. |
| Finland | 24.8 | 19.2 | 0.1 | 19.3 |
| Belgium | 24.7 | 21.2 | 1.4 | 22.6 |
| Italy | 24.4 | 20.9 | 1.1 | 22.0 |
| Greece | 24.2 | .. | .. | .. |
| Norway | 23.9 | 19.6 | 0.8 | 20.4 |
| Poland | 22.2 | .. | .. | .. |
| United Kingdom | 21.8 | 19.8 | 0.4 | 20.2 |
| Netherlands | 21.4 | 18.0 | 0.4 | 18.4 |
| Luxembourg | 20.8 | .. | .. | .. |
| Portugal | 20.3 | .. | .. | .. |
| Czech Republic | 20.1 | 18.7 | 0.0 | 18.7 |
| Hungary | 20.1 | .. | .. | .. |
| Iceland | 19.8 | 17.6 | 0.7 | 18.3 |
| Spain | 19.6 | 16.7 | 0.0 | 16.7 |
| New Zealand | 18.5 | 15.5 | 0.0 | 15.5 |
| Australia | 18.0 | 17.1 | 0.7 | 17.8 |
| Slovakia | 17.9 | 16.4 | 0.2 | 16.6 |
| Canada | 17.8 | 17.1 | 0.0 | 17.1 |
| Japan | 16.9 | 17.1 | 0.7 | 17.8 |
| United States | 14.7 | 15.9 | 0.4 | 16.3 |
| Ireland | 13.8 | 12.2 | 0.0 | 12.2 |
| Turkey | 13.2 | .. | .. | .. |
| Korea | 6.1 | 6.1 | 2.2 | 8.3 |
| Mexico | 5.1 | 6.3 | 0.0 | 6.3 |
| Average | 20.6 | 17.9 | 0.5 | 18.4 |

1. Countries are ranked in descending order by gross public social spending.

2. Adjusts for the impact of the tax system on social expenditure.

Source: Adema and Ladaïque (2005).

Social spending is concentrated among the elderly

17. Social outlays in Japan are focused on insurance systems for pensions, healthcare, unemployment and long-term nursing care (Annex 2). Total spending on these programmes amounted to nearly 80% of public social spending in FY 2003 (Table 7). Around 70% of the outlays by social insurance programmes were for elderly persons. Such spending, combined with a relatively high rate of labour force participation of older workers, has helped maintain the income of the elderly at a fairly high level. Indeed, the disposable income of the over 65 age group in Japan is 84% of the 18 to 65 age group, compared to an OECD average of 76%. In contrast to social insurance, spending on welfare programmes such as livelihood protection²⁶ and family benefits is much lower, accounting for 5.5% of total public social spending.

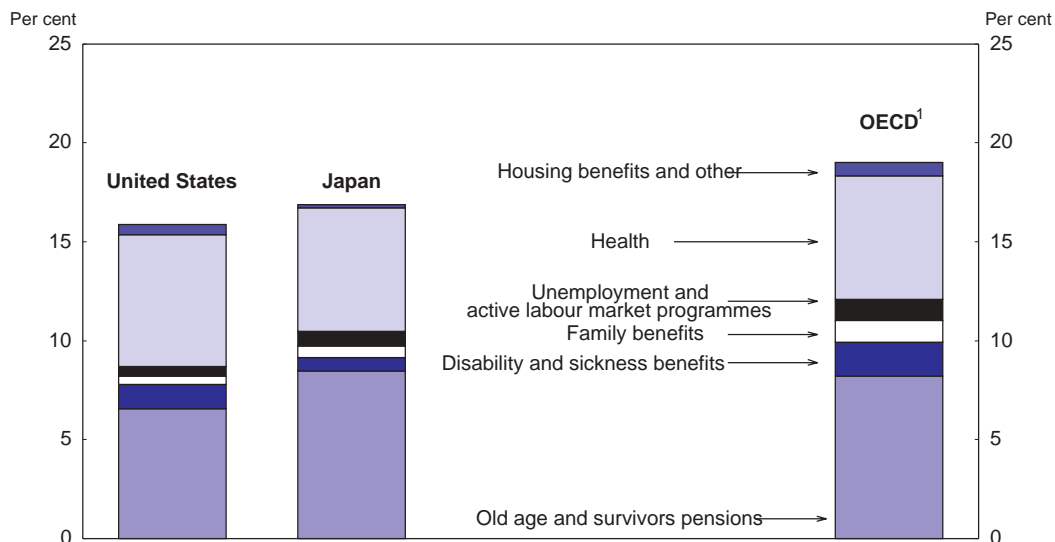
26. In 2005, 1.1% of the population received benefits from the Livelihood Protection Programme.

Table 7. Social insurance and welfare programmes in Japan
FY 2003

| Revenue | Trillion yen | Per cent | Expenditure by scheme | Trillion yen | Per cent |
|---------------------|--------------|--------------|---------------------------|--------------|--------------|
| Insurance premiums | 54.6 | 54.0 | Social insurance | 76.5 | 74.3 |
| Insured persons | 27.4 | 27.4 | Pension benefits | 43.0 | 41.0 |
| Firms | 27.3 | 26.9 | Medical insurance | 14.7 | 14.0 |
| General tax revenue | 27.8 | 27.8 | Healthcare for elderly | 10.7 | 10.2 |
| Central government | 21.1 | 20.9 | Long-term care | 5.1 | 4.9 |
| Local government | 6.6 | 6.6 | Employment insurance | 2.0 | 1.9 |
| Income from capital | 18.8 | 18.6 | Accident insurance | 1.0 | 1.0 |
| | | | Social welfare | 5.8 | 5.5 |
| | | | Livelihood protection | 2.4 | 2.3 |
| | | | Other social welfare | 2.5 | 2.4 |
| | | | Family benefits and other | 0.9 | 0.8 |
| | | | Civil servant pensions | 1.4 | 1.3 |
| | | | Public health programmes | 0.6 | 0.6 |
| | | | Administrative costs | 1.3 | 1.2 |
| | | | Transfers to funds | 15.9 | 15.2 |
| | | | Other | 3.4 | 3.2 |
| Total | 101.3 | 100.0 | Total | 104.9 | 100.0 |

Source: Ministry of Health, Labour and Welfare.

Figure 4. Composition of public social spending
Per cent of GDP in 2001



1. Weighted average of 29 countries.
Source: OECD, Social expenditure database.

18. With the rising trend during the 1990s, expenditures on pensions and healthcare in Japan are larger than the OECD average (Figure 4). However, outlays for unemployment and active labour market policies are significantly less, reflecting the low rate of unemployment and the fact that a relatively low proportion of unemployed receive benefits (see below). In addition, spending on family benefits and disability and sickness payments is significantly smaller than the OECD average. In 2001, public old-age pensions per elderly person were 17 times larger than social spending per person under the age of 65, a ratio that is double the OECD average, reflecting the low level of spending on the working-age population. In sum, Japanese social spending is somewhat below the OECD average and more concentrated on the elderly.

Benefits are less concentrated on low-income households

19. The third factor - the progressivity of social spending - is measured by the “quasi-Gini coefficient”, which varies from -100 to 100. For transfers, a value of zero indicates a flat rate that pays the same amount of transfer to each household. Positive values between zero and 100 indicate that the amount of transfers increases with private income. For pensioners, the quasi-coefficient is positive in most countries, including Japan, as the amount of benefits is linked to past income (Table 8). For the working-age population, in contrast, the quasi-Gini coefficient is negative as expected in most countries, indicating that the amount of transfers increase as the level of household income declines. In contrast, in Japan, the quasi-Gini coefficient for the 18 to 65 age group is positive, suggesting that the distributional impact of transfers on low-income households is relatively weak.²⁷ As for direct taxes, the quasi-Gini coefficient in 2000 was 31.9, indicating less progressivity than the OECD average of 44.1.

Table 8. The progressivity of transfers and taxes in OECD countries
Quasi-Gini coefficients¹ in 2000

| | Japan | OECD average ² | Highest | Lowest |
|----------------|-------|---------------------------|---------|--------|
| Cash transfers | | | | |
| Pensions | 11.0 | 12.0 | 44.6 | -11.9 |
| Working-age | 3.3 | -7.2 | 43.8 | -42.4 |
| Total | 3.2 | -6.5 | 37.1 | -38.3 |
| Direct taxes | 31.9 | 44.1 | 57.3 | 22.8 |

1. This measure varies from -100 to 100, with a value of zero for a flat rate that pays each household the same amount of transfer. It is calculated by comparing the share of social security benefits received by deciles ranked from the poorest to the richest. Values between zero and 100 mean that the share of transfers received increases with private income. Conversely, values between zero and -100 indicate that the share of transfers received decreases as income increases. Thus, negative numbers imply that a greater share of transfers go to the poor. For taxes, the coefficient is positive for all countries. Since taxes are deducted from incomes, the higher the coefficient, the more equalizing the impact of taxes.

2. For transfers, the average includes all OECD countries except Korea, Iceland and the Slovak Republic. For taxes, the average includes 19 countries.

Source: Whiteford (2006).

27. Transfers still have a redistributive effect as long as their quasi-Gini coefficient is below the Gini coefficient of market income. This is the case in all OECD countries, including Japan.

Relative poverty

20. The increase in income inequality in Japan was accompanied by a rise in the relative poverty rate²⁸ - defined as an income that is less than 50% of the median - from 12.0% of the total population in the mid-1980s to 15.3% in 2000. The OECD average increased from 9.4% to 10.6% over the same period. About a quarter of the increase in Japan was due to population ageing; the poverty rate would have only risen to 14.5% if the age-distribution of the population had remained unchanged from the mid-1980s.²⁹ A second factor was the increase in the share of people living alone from 3.5% in the mid-1980s to 6.8% in 2000. This is due to more young people moving away from home to study and work and a rise in the share of elderly persons living alone from 1% to 3% of the total population. About half of the increase in the poverty rate is due to the increase in single-person households: the poverty rate would have only risen to 13.6% - rather than 15.3% - if the household structure had remained as in the mid-1980s. These factors also boosted poverty rates in other OECD countries. In particular, the share of single-person households increased from an average of 9% in the mid-1980s in the OECD area to 11% in 2000, nearly double the level of Japan. Japan's poverty rate would thus likely be significantly higher if its proportion of single households were not so far below the OECD average.

21. The relative poverty rate for the working-age population in Japan increased from 11.9% in the mid-1990s to 13.5% in 2000 compared to the OECD average of 8.4% (Table 9). The high level of poverty is surprising given the level of employment: only 2.8% of the population in Japan in 2000 lived in a household in which no one worked, compared to an OECD average of 9.4%.³⁰ The 1.6 percentage point rise in poverty - the third largest in the OECD area - was due to changes in market income,³¹ reflecting the rise in wage dispersion in the context of increased labour market dualism.

28. Patterns in inequality and relative poverty over time are similar in most OECD countries. The cross correlation of the Gini coefficient and the relative poverty rate during the period 1970 to 2001 was 0.90. The relative poverty rate is based on disposable income.

29. The rate of relative poverty for the over 65 age group fell from 23% to 21%, although it remains well above the OECD average of 13%.

30. This refers to the population living in households headed by a person of working age. The increase in poverty is consistent with data from the Ministry of Health, Labour and Welfare showing that the proportion of households with an income of less than 2 million yen rose from 14% in 1998 to 18% in 2002. In addition, the share of households with no savings doubled from 12 to 24% between 1999 and 2005.

31. According to a study of poverty in households headed by a person of working age, changes in market income boosted the poverty rate by 2.4 percentage points. This was partially offset - 0.7 percentage point - by an increased number of two-worker households (Förster and Mira d'Ercole, 2005). In contrast, market income had almost no effect on poverty, on average, in the OECD area.

Table 9. The impact of tax and social spending programmes on poverty in OECD countries
Relative income poverty as a percentage of the working-age population¹

| | Mid-1990s | | | 2000 | | |
|----------------------|-----------------------------|--|---------------------------------|-----------------------------|--|---------------------------------|
| | Poverty rate: market income | Reduction in poverty due to tax/benefit system | Poverty rate: disposable income | Poverty rate: market income | Reduction in poverty due to tax/benefit system | Poverty rate: disposable income |
| Czech Republic | 17.7 | 14.6 | 3.0 | 19.5 | 15.7 | 3.8 |
| Denmark | 20.5 | 16.0 | 4.5 | 18.5 | 13.5 | 5.0 |
| Sweden | 18.6 | 14.5 | 4.2 | 16.2 | 11.0 | 5.1 |
| Netherlands | 17.6 | 11.4 | 6.2 | 14.9 | 9.0 | 5.9 |
| France | 26.1 | 19.4 | 6.8 | 24.1 | 18.1 | 6.0 |
| Norway | 14.2 | 7.5 | 6.7 | 14.5 | 8.5 | 6.0 |
| Finland | 18.1 | 12.7 | 5.4 | 15.3 | 8.8 | 6.4 |
| Germany | 18.6 | 11.3 | 7.2 | 20.5 | 12.5 | 8.0 |
| Australia | 20.5 | 13.0 | 7.5 | 20.5 | 11.9 | 8.6 |
| United Kingdom | 20.4 | 12.5 | 8.0 | 19.9 | 11.2 | 8.7 |
| New Zealand | 18.2 | 11.2 | 7.0 | 18.3 | 8.8 | 9.5 |
| Portugal | 16.6 | 6.6 | 10.0 | 15.7 | 6.1 | 9.6 |
| Canada | 17.8 | 8.4 | 9.4 | 16.0 | 5.7 | 10.3 |
| Italy | 23.6 | 10.9 | 12.7 | 21.8 | 10.3 | 11.5 |
| Ireland | 26.6 | 18.0 | 8.6 | 18.8 | 6.9 | 11.9 |
| Japan | 14.0 | 2.2 | 11.9 | 16.5 | 3.0 | 13.5 |
| United States | 18.7 | 5.2 | 13.5 | 18.0 | 4.3 | 13.7 |
| Average ² | 19.3 | 11.5 | 7.8 | 18.2 | 9.7 | 8.4 |

1. Countries are ranked by the poverty rate of disposable income in 2000.

2. Average of the 17 countries in the table. The decline in the impact of the tax/benefit system between the mid-1990s and 2000 reflects falling unemployment rates.

Source: Förster and Mira d'Ercole (2005).

Social spending and relative poverty

22. The tax and social spending programmes on poverty helped to limit the rise in relative poverty in the second half of the 1990s. However, its impact – at two to three percentage points in both the mid-1990s and 2000 – was much smaller than in the OECD area (Table 9). The relationship between public social spending and poverty outcomes is striking: relative poverty rates among the working-age population are lowest in countries where social spending (excluding healthcare) for that age group is highest (Förster and Mira d'Ercole, 2005). The high level of relative poverty in Japan is consistent with the low level of public social spending on the working-age population discussed above.

23. The impact of government programmes to reduce poverty depends not only on the amount of spending but also on the criteria used in its allocation. In principle, a carefully targeted system can significantly reduce poverty even when the total amount of spending is small. However, in Japan, the share of transfers allocated to households in the lower part of the income distribution is relatively small (Table 10). Indeed, the lowest income quintile received 15.7% of government transfers compared to an OECD average of 22.8%. Consequently, transfers to the low-income quintile accounted for only 2.7% of total disposable income, well below the OECD average. In contrast, the share of transfers received by high-income households in Japan is larger than the OECD average. As a result, the ratio of the transfers received by the bottom and top quintiles was 0.8 in 2000 (as shown in the column on the far right) compared to an OECD average of 2.1, indicating that transfers are less targeted on the poor in Japan.

Table 10. Distribution of transfers and taxes in OECD countries
Around 2000

| | Transfers as % of Household Disposable Income (HDI) | Share of lowest quintile (%) | Transfers to lowest quintile as % of total HDI | Taxes as % of HDI | Share of lowest quintile | Taxes paid by lowest quintile as % of HDI | Net transfers to lowest quintile | Quintile ratio ¹ |
|----------------------|---|------------------------------|--|-------------------|--------------------------|---|----------------------------------|-----------------------------|
| | (1) | (2) | (3) = 1*2 | (4) | (5) | (6) = 4*5 | (7) = 3 - 6 | |
| Australia | 15.1 | 40.6 | 6.1 | 24.8 | 0.4 | 0.1 | 6.0 | 12.7 |
| Austria | 16.3 | 15.5 | 2.5 | .. | .. | .. | .. | 0.7 |
| Belgium | 31.4 | 20.3 | 6.4 | 37.3 | 1.0 | 0.4 | 6.0 | 1.3 |
| Canada | 14.7 | 26.3 | 3.9 | 28.8 | 3.6 | 1.0 | 2.8 | 1.7 |
| Czech Republic | 23.9 | 25.1 | 6.0 | 19.6 | 3.1 | 0.6 | 5.4 | 2.8 |
| Denmark | 25.5 | 35.9 | 9.2 | 53.3 | 6.0 | 3.2 | 6.0 | 4.3 |
| Finland | 15.6 | 32.6 | 5.1 | 32.6 | 4.0 | 1.3 | 3.8 | 3.3 |
| France | 30.1 | 19.6 | 5.9 | 9.2 | 7.7 | 0.7 | 5.2 | 0.8 |
| Germany | 26.9 | 20.2 | 5.4 | 38.3 | 3.0 | 1.2 | 4.3 | 1.0 |
| Greece | 21.7 | 12.6 | 2.7 | .. | .. | .. | .. | 0.4 |
| Hungary | 33.7 | 19.8 | 6.7 | .. | .. | .. | .. | 1.3 |
| Ireland | 14.9 | 33.5 | 5.0 | 17.3 | 1.2 | 0.2 | 4.8 | 3.1 |
| Italy | 28.0 | 11.7 | 3.3 | 28.9 | 2.7 | 0.8 | 2.5 | 0.4 |
| Japan | 17.0 | 15.7 | 2.7 | 18.2 | 7.4 | 1.4 | 1.3 | 0.8 |
| Luxembourg | 24.6 | 18.0 | 4.4 | .. | .. | .. | .. | 1.0 |
| Mexico | 5.6 | 11.0 | 0.6 | .. | .. | .. | .. | 0.2 |
| Netherlands | 19.0 | 32.5 | 6.2 | 34.5 | 5.2 | 1.8 | 4.4 | 3.1 |
| New Zealand | 13.6 | 33.3 | 4.5 | 27.7 | 0.7 | 0.2 | 4.3 | 5.1 |
| Norway | 20.6 | 30.7 | 6.3 | 34.2 | 4.3 | 1.5 | 4.9 | 2.9 |
| Poland | 26.0 | 14.0 | 3.6 | .. | .. | .. | .. | 0.7 |
| Portugal | 19.5 | 16.8 | 3.3 | 17.2 | 3.5 | 0.6 | 2.7 | 0.5 |
| Spain | 21.0 | 16.0 | 3.4 | .. | .. | .. | .. | 0.8 |
| Sweden | 32.2 | 25.8 | 8.3 | 46.3 | 5.5 | 2.6 | 5.8 | 2.0 |
| Switzerland | 20.8 | 20.8 | 4.3 | 34 | 12.6 | 4.3 | 0.1 | 0.4 |
| Turkey | 1.9 | 8.5 | 0.2 | .. | .. | .. | .. | 0.3 |
| United Kingdom | 16.8 | 33.7 | 5.7 | 21.5 | 1.8 | 0.4 | 5.3 | 4.8 |
| United States | 7.4 | 25.5 | 1.9 | 32.1 | 1.4 | 0.5 | 1.4 | 1.4 |
| Average ² | 20.1 | 22.8 | 4.6 | 29.3 | 4.0 | 1.2 | 4.0 | 2.1 |

1. The ratio of transfers received by the bottom income quintile to those received by the top quintile.

2. Excludes Iceland, Korea and the Slovak Republic.

Source: Whiteford (2006).

Table 11. Proportion of the population receiving government benefits in OECD countries
Percentage of working-age population in 1999

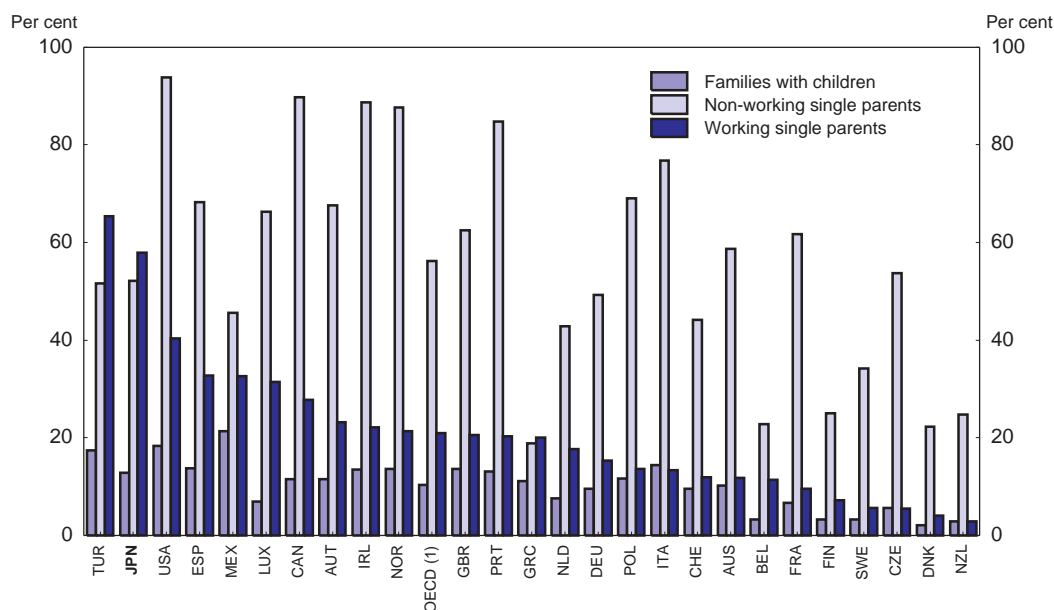
| | Aus- tralia | Austria | Bel- gium | Can- da | Den- mark | France | Ger- many | Ireland | Japan | Nether- lands | New Zealand | Slovak Rep. | Spain | Sweden | UK | US | Mean |
|------------------------------------|----------------|---------|--------------|------------|--------------|--------|--------------|---------|-------------|------------------|----------------|----------------|-------|--------|------|------|------|
| Old age | 1.9 | 7.4 | 7.2 | 3.1 | 4.0 | 7.0 | 4.6 | 0.5 | 5.1 | 0.8 | 1.4 | 9.4 | 1.1 | 0.4 | 3.4 | 1.8 | 3.7 |
| Survivors | 0.3 | 2.1 | 1.1 | 1.7 | 0.0 | 0.3 | 1.7 | 1.4 | 1.6 | 1.0 | 0.4 | 1.1 | 1.8 | 0.3 | 0.9 | 0.6 | 1.0 |
| Sickness | 1.4 | 2.0 | 1.1 | 0.2 | 4.6 | 1.8 | 2.5 | 1.9 | 1.2 | 3.4 | 1.5 | 3.1 | 0.4 | 5.8 | 0.8 | 2.1 | 2.1 |
| Disability | 4.9 | 3.5 | 3.6 | 4.9 | 6.7 | 4.8 | 4.1 | 3.9 | 1.9 | 7.2 | 2.3 | 5.6 | 3.9 | 6.5 | 6.4 | 6.3 | 4.8 |
| Maternity and parental leave | 0.0 | 2.0 | 0.2 | 0.4 | 1.6 | 1.9 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 4.4 | 0.0 | 2.0 | 0.3 | 0.0 | 0.8 |
| Care & leave | 0.3 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.2 |
| Unemployment | 5.6 | 3.8 | 6.9 | 5.8 | 4.4 | 4.7 | 6.6 | 6.7 | 1.1 | 4.1 | 6.6 | 3.6 | 3.9 | 4.0 | 2.9 | 1.2 | 4.5 |
| Lone parents/ social assistance | 3.2 | 0.8 | 2.4 | 1.9 | 1.6 | 3.0 | 2.2 | 4.2 | 0.3 | 1.2 | 4.4 | 11.1 | 0.3 | 1.1 | 2.8 | 1.7 | 2.6 |
| Total | 17.5 | 21.6 | 23.4 | 18.0 | 22.9 | 23.6 | 22.0 | 19.3 | 11.4 | 17.7 | 16.6 | 38.2 | 11.3 | 20.1 | 18.4 | 13.7 | 19.7 |

Source: OECD, *Employment Outlook* (2003).

24. The share of the working-age population receiving income-replacing benefits also illustrates the relatively limited coverage of social spending (Table 11). The proportion receiving benefits in Japan was the lowest, at 11.4%, of any of the 16 countries for which data are available, even though the proportion of the working-age population that receives old-age and survivor benefits was above the OECD mean. Indeed, Japan was one of only two countries in which the share of the population receiving benefits from the government was below the relative poverty rate. The biggest difference between the OECD mean and Japan is in the area of unemployment benefits, reflecting the relatively low number of unemployed. Moreover, strict eligibility conditions and the short duration of benefits in Japan also reduce the proportion of unemployed receiving benefits to 34% compared to an OECD average of 92%.³²

25. The number of recipients of social assistance/support for lone parents is exceptionally low at 0.3% of the working-age population in Japan, compared to an OECD mean of 2.6%. Moreover, it has fallen from 0.5% in 1980s despite the increase in poverty during the 1990s. Part of the difference is explained by the fact that the share of the population living in lone-parent households, at 1.3%, is less than half of the OECD average. According to the MHLW, 83% of single mothers are employed, although about half are non-regular workers.³³ Even though around 70% of single mothers receive the childcare allowance for single mothers, 58% of working single parents in 2000 lived in relative poverty, well above the OECD average of 21%,³⁴ and higher than the 52% of non-working single parents in relative poverty (Figure 5).

Figure 5. Relative poverty rates in households with children
Households with a head of working age, around the year 2000



1. Average for 26 countries.
Source: OECD, ELS database.

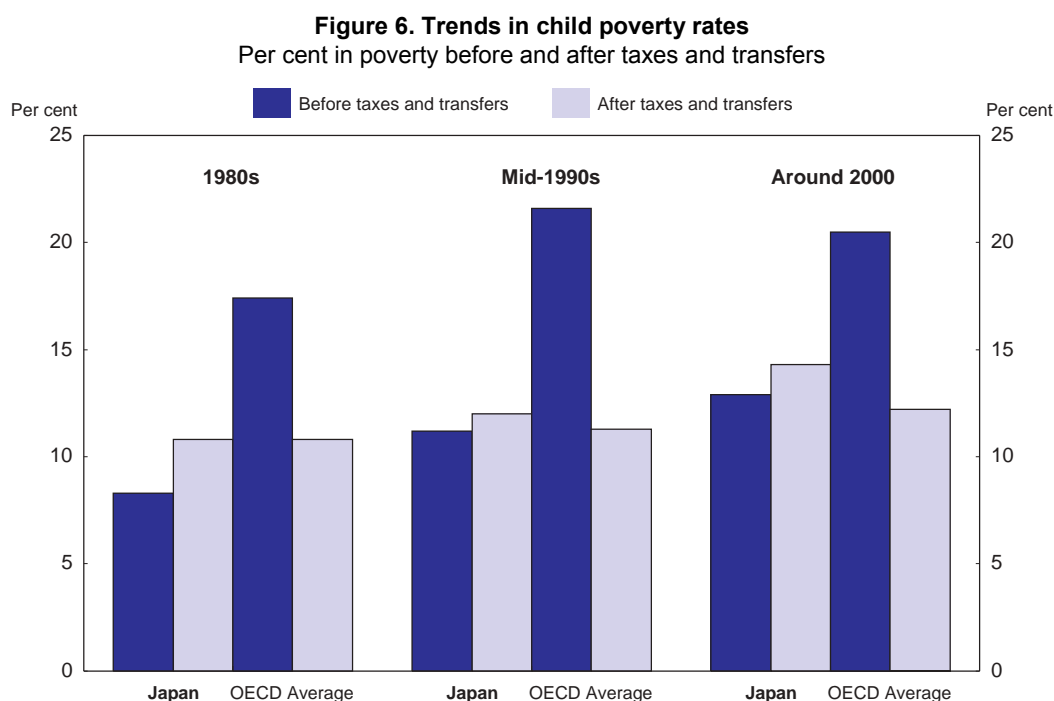
32. The level of benefits, though, is relatively high. The average replacement rate for those who are unemployed for 60 months and qualify for social assistance is around 67%, compared to an OECD average of 62% (based on the average for four family types and two earning levels). See *Society at a Glance*, 2005.
33. In contrast, three-quarters of single fathers who work are regular workers, thus reducing the extent of poverty and illustrating the drawbacks of labour market dualism.
34. Of the single mothers who do not work, 22% received social assistance in 2003.

Japan is one of only three OECD countries, along with Greece and Turkey, which have a higher poverty rate for single parents that are working than for those that are not employed. The childcare allowance for single mothers was reformed in 2002 so that the total amount of income rises as earnings from work increases.

26. Widespread poverty among single parents results in a high incidence of poverty among children in Japan. Indeed, the rate of child poverty was 14.3% in 2000, compared with an OECD average of 12.2%. Given the high cost of schooling and private tutoring institutes, children in poor families are at risk of receiving an inadequate education, thus tending to reduce the growth potential and perpetuating poverty across generations. The most recent PISA tests of student performance show increased stratification of the results for Japan. In contrast to other OECD countries, child poverty is concentrated in working families; 49% of child poverty is in households with at least two earners and another 49% in households with one earner. Only 2% of child poverty is in households with no earners, in contrast to an OECD average of 32%. This suggests relatively little scope to reduce child poverty by boosting employment, which would be highly effective in other OECD countries. Instead, in-work benefits for working parents, together with a reduction in the dualism in employment conditions, appear to be the key.

Taxes and relative poverty

27. While poor households in Japan receive a low share of transfers, they bear a high tax burden relative to other OECD countries. The lowest income quintile paid 7.4% of total direct taxes in 2000 compared to an OECD average of 4% (Table 10). Combining the impact of transfers and taxes, the net transfer to the lowest income quintile in Japan is 1.3%, compared to an average of 4% in the OECD area. In sum, the tax and benefit systems increase the income of low-income households by a relatively small amount in Japan. Indeed, Japan is the only OECD country in which the rate of child poverty has been consistently higher after taxes and transfers than before (Figure 6).



Source: Whiteford and Adema (2006).

Conclusion

28. The low level of market income inequality that was characteristic of the post-war era has been converging in recent years to the OECD average. Given the relatively small impact of the tax and benefit systems on income distribution, the level of inequality in disposable income in Japan has risen above the OECD average (Table 12). While population ageing has played a role, there has also been a marked rise in inequality among the 18 to 65 age group as a result of the increasing variance in wages. This trend cannot be explained by differences in the earnings of full-time employees, which have narrowed in recent years. Instead, the greater dispersion of market income is due to the increasing proportion of non-regular workers - primarily part-time employees - who are paid only 40% as much per hour as full-time employees. The growing dualism in the labour market thus creates serious equity issues, which are exacerbated by the limited mobility between the regular and non-regular segments of the labour market. Dualism also has a negative impact on potential growth, as non-regular workers receive less training by firms, thus limiting their human capital and productivity gains.

29. Rising income inequality in the working-age population has been accompanied by a hike in the rate of relative poverty to one of the highest levels in the OECD area (Table 12). One reason for high poverty is the limited effect of tax and social spending policies, reflecting the below-average level of social spending as a share of GDP, even after taking account of the tax system and mandated private outlays. Moreover, social spending is concentrated in pension and healthcare programmes that primarily benefit the elderly, while outlays for the working-age population are relatively limited. In addition, the proportion of benefits accruing to low-income households is small compared to other OECD countries. On the tax side, the system has become much less progressive in recent years.

30. Recommendations to address inequality and relative poverty are summarised in Box 1. Given the severe fiscal situation and the rapid pace of population ageing (see Chapter 3 of the 2006 *OECD Economic Survey of Japan*), there is little scope for additional social spending aimed at the working-age population. Moreover, a broad-based expansion in social programmes may not succeed in substantially reducing poverty rates. Experience in OECD countries shows only a weak relationship between increases in social spending and overall reductions in poverty (Figure 7). Instead, the priority should be to increase the returns from work by reducing labour market dualism and by better targeting existing social programmes on the most vulnerable groups. The priority is single parents, who have a poverty rate of over 50%. This would also help to reduce the rate of child poverty from its currently high level. With 98% of child poverty in working families, measures to increase employment are unlikely to reduce child poverty significantly. Instead, it is necessary to improve family benefits for employed persons, while limiting the creation of work disincentives and poverty traps. In the absence of such targeted policies, there is likely to be increased pressure to reduce poverty through steps to create a more generous overall welfare state. However, this would require substantial increases in public spending and revenue, with possible adverse economic implications at a time when coping with population ageing and raising potential growth from its low level is a priority in Japan (see Chapter 5 of the 2006 *OECD Economic Survey of Japan*). In addition to better target social expenditures, the reform of the tax system should aim at reducing the relative share of the tax burden that is borne by low-income households.

Table 12. Summary of income distribution and relative poverty
Indicators in 2000

| | | Working-age population | | Elderly population | | Total population | |
|---|------------------------------|------------------------|--------------|--------------------|--------------|------------------|--------------|
| | | Japan | OECD average | Japan | OECD average | Japan | OECD average |
| Market-income inequality ¹ | Level | 36.2 | 39.3 | 62.9 | 65.1 | 41.0 | 44.3 |
| | Rank | 12 th | 14 countries | 7 th | 14 countries | 11 th | 14 countries |
| | Change in % ³ | 17.0 | 11.1 | 32.9 | 1.9 | 29.3 | 10.5 |
| | Change in level ⁴ | 5.2 | 3.9 | 15.6 | 1.2 | 9.4 | 4.3 |
| Disposable income inequality ¹ | Level | 31.0 | 28.8 | 33.8 | 27.0 | 31.4 | 30.7 |
| | Rank | 5 th | 14 countries | 2 nd | 14 countries | 8 th | 23 countries |
| | Change in % ³ | 12.2 | 10.1 | -0.8 | 1.1 | 12.9 | 7.3 |
| | Change in level ⁴ | 3.4 | 2.6 | -0.2 | 0.3 | 3.6 | 2.1 |
| Relative poverty ² | Level | 13.5 | 8.4 | 21.1 | 13.9 | 15.3 | 10.3 |
| | Rank | 2 nd | 17 countries | 7 th | 24 countries | 5 th | 26 countries |
| | Change in % ³ | 13.7 | 8.4 | -8.3 | -5.7 | 28.6 | 11.5 |
| | Change in level ⁴ | 1.6 | 0.6 | -1.9 | -0.8 | 3.4 | 1.1 |

1. As measured by the Gini coefficient *100.

2. Percentage of population with an income below one-half of the median.

3. Mid-1980s to 2000.

4. Changes in percentage points between mid-1980s and 2000.

Source: Calculations based on Förster and Mira d'Ercole (2005).

Box 1. Summary of recommendations to address inequality and relative poverty

Reverse the trend toward increasing labour market dualism through a comprehensive approach

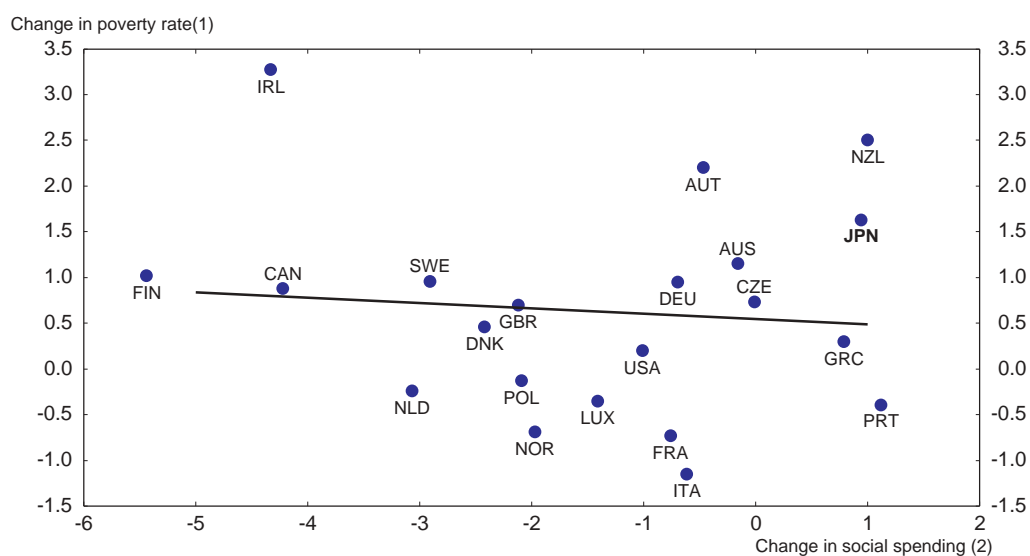
- Reduce employment protection for regular workers to reduce the incentive for hiring non-regular workers to enhance employment flexibility.
- Expand the coverage of non-regular workers by social insurance systems based in workplaces, in part by improving compliance with current insurance systems.
- Increasing training to enhance employability

Policies to contain spending

- Shift the allocation of social spending to increase the share received by low-income households.
- Target social spending on vulnerable groups, such as single parents, while taking care to limit the creation of poverty traps and work disincentives.
- Take account of income distribution in reforming the tax system.

31. With the budget situation limiting the scope for greater social spending, it is essential to address the underlying factors behind the rise in market income inequality that is boosting inequality in disposable income and relative poverty rates. The key is to reverse the trend toward labour market dualism. According to government surveys, the main factors that encourage the hiring of non-regular workers are their lower labour costs and greater employment flexibility. Reducing dualism, therefore, requires addressing these two factors, while at the same time avoiding measures that would reduce total employment. The first advantage of hiring non-regular workers - lower labour costs - results from lower hourly wages, as well as the exemption of non-regular workers from company-based social insurance systems. While wage rates are set by the private sector, the government should increase the social safety net coverage of non-regular workers to reduce the cost advantage of hiring such workers, possibly accompanied by targeted in-work benefits to prevent unemployment. The second advantage – greater employment flexibility - could be narrowed by either reducing employment protection for regular workers or tightening that of non-regular workers, including through better compliance. However, as the latter approach would likely reduce overall employment, the priority should be to ease the protection of regular workers, thereby reducing the incentive to circumvent strict employment protection by hiring non-regular workers.

Figure 7. Changes in social spending and poverty among the working-age population
Changes in percentage points, 1995-2000



1. Change in the relative poverty rate, defined as a household income that is less than half of the median. A negative value denotes a reduction in poverty rate over the five-year period.
 2. Social spending is defined as public and mandatory private social spending on the 18 to 65 age group.
- Source: OECD, ELS database.

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Annex 1

The measurement of inequality and poverty

Characteristics of the data³⁵

1. The data used in this paper are drawn from the OECD's income distribution database, which collects inequality and poverty information from national sources based on a standardised methodology regarding data characteristics. Because of the emphasis on changes in income inequality and poverty, an effort was made to improve data comparability over time for individual countries. The use of a common questionnaire and methodology also allows better comparisons of levels of different variables across countries. The basic concept underlying the data is that of *household disposable income*. To account for possible scale economies in consumption, household income is "equivalised" using the square root of household size.³⁶ Separate data are available for persons of working-age (18 to 65) and retirement age (over 65) and for households with different characteristics (age of household head, presence of children and of an adult partner, employment status of household members).

2. Despite efforts to ensure country comparability, some differences in national data escape "standardisation" across countries. Some of the main features that may affect comparisons across countries and time include the following:

- ***Differences in the definition of households.*** For most countries, households refer to a group of people having common provisions for essential items, but in some countries they may refer to people living in the same home. More restrictive definitions of "household" will tend to reduce household size and equivalised income (and increase poverty rates).
- ***Period over which income is assessed.*** Data generally refer to income in the year preceding the interview. However, even for countries where annual income data are shown, income may be assessed over a shorter reference period and then converted to an "annual equivalent". Countries using shorter reference periods to measure income will generally display higher poverty rates because of the greater volatility of weekly income and higher probability of recording periods of "temporary" income shortfalls. In the case of Japan, income data are reported on an annual basis.
- ***Gross and net income.*** For Japan and 21 other OECD countries, all income components are reported on a "gross" basis, *i.e.* before deduction of direct and payroll taxes (social security contributions) paid by individuals and households. However, there are differences in the way taxes are computed, with some countries (including Japan) relying on data as reported by respondents, and others on information from tax records, and others yet on values "imputed" through micro simulation models applied to individual records.
- ***Income components.*** The data generally distinguish between earnings (broken down into the earnings of the household head, the spouse and other household members); self-employment

35. This section draws heavily on Annex 1 of Förster and Mira d'Ercole (2005).

36. This implies that, to keep economic well-being unchanged, household income needs to increase by 41% when a second member joins the household, by a further 32% for a third, and by 26% for the fourth.

income; capital income (rents, dividends and interest); and current transfers received by households. Capital income is generally limited to income paid in cash. Current transfers refer to cash transfers paid by government to individuals and households. Because of the exclusion of in-kind transfers, changes in the nature of government support (*e.g.* from provision of social housing at subsidised rates to housing benefits paid in cash) may distort results.

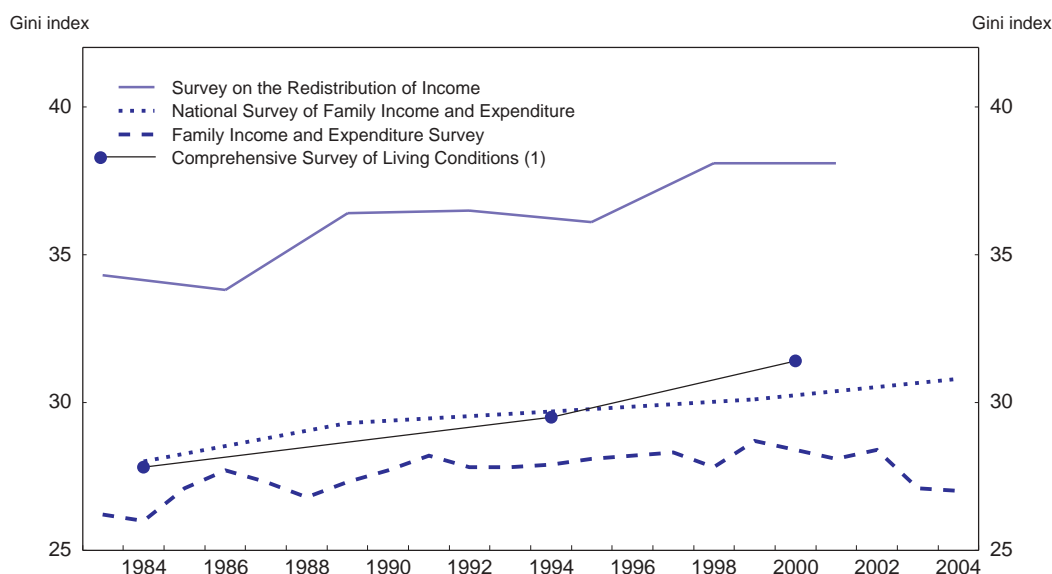
- **Recording of private pensions.** There are large differences across countries in terms of the nature and institutional arrangements governing private pensions. These differences relate both to their mandatory or voluntary character, and to the nature of the agencies that are responsible for their management and administration (*i.e.* in some cases, they may be part of the social security administration, while in others they may be fully private). Also, private pensions are not always identified separately in the household surveys of some countries. Because of these differences, private pensions that are substantially similar may be recorded differently across countries.

Comparison of data from Japanese government surveys

3. There are a number of government surveys that provide information on income distribution in Japan (Figure A1.):

- The *Comprehensive Survey of Living Conditions of the People on Health and Welfare* by the Ministry of Health, Labour and Welfare (MHLW), which carries out a large-scale survey every three years. Its Income Survey includes about 32 000 households and replies are received by 80% of those surveyed. The Survey covers all items in gross income.
- The *Survey on the Redistribution of Income* by the Ministry of Health, Labour and Welfare. The sample data is taken from the *Comprehensive Survey of Living Conditions of the People on Health and Welfare*.
- The *National Survey of Family Income and Expenditure* by the Ministry of Internal Affairs and Communications, which is based on a sample of 60 000 households.
- The *Family Income and Expenditure Survey* by the Ministry of Internal Affairs and Communications, which is based on only 8 000 households.

Figure A1. Different measures of the Gini coefficient in Japan
Gini coefficient * 100 for disposable income



1. Survey data used by the OECD to calculate an internationally consistent estimate of Gini coefficients.
Source: Ministry of Health, Labour and Welfare, Ministry of Internal Affairs and Communications and Förster and Mira d'Ercole (2005).

4. All four Surveys report a rise in income inequality between the mid-1980 and 2000, although by differing amounts. The data from the *Comprehensive Survey of Living Conditions of the People on Health and Welfare* (on which the comparative OECD study is based), gives a 12.9% rise in income inequality for the total population, compared to 11.1% in the *Survey on the Redistribution of Income*, 8.3% in the *National Survey of Family Income and Expenditure* and 6.1% in the *Family Income and Expenditure Survey*.

5. The results of the *Comprehensive Survey of Living Conditions*, which is used by the OECD for its comparative analysis, and the *Survey on the Redistribution of Income*, are similar as expected as the data comes from the same survey by MHLW (Table A1). The *Comprehensive Survey* exclude households headed by a person below the age of 17 and all individuals whose age is not recorded, thus allowing comparisons of working-age and elderly populations, as shown in Tables 1 and 3. In contrast, the data from the *Survey on the Redistribution of Income* that are available to the OECD Secretariat do not have separate measures of inequality for the working-age and elderly populations. However, persons with an income three times larger than the standard deviation are excluded from the *Comprehensive Survey* (1.6% of all persons in 1995 and 1.3% in 2000), thus reducing inequality measures that are sensitive to the high end of the income distribution. In sum, the Gini coefficients from the two *Surveys* agree that government policies have had a growing impact on reducing inequality but have been more than offset by the rising inequality in market incomes. The main difference between them concerns the level of inequality. The Gini coefficients calculated from the *Comprehensive Survey* by the OECD are adjusted for family size as noted above, thus making them significantly less than the Gini coefficient from the *Survey on the Redistribution of Income*, which is not adjusted.

Table A1. Comparison of different measures of the Gini coefficient
The Gini coefficient multiplied by 100 for the total population

| | Market income | | Disposable income | | Impact of government policies ¹ | |
|---------------------------|--|--|--|--|--|--|
| | Survey of living conditions ² | Survey on income distribution ³ | Survey of living conditions ² | Survey on income distribution ³ | Survey of living conditions ² | Survey on income distribution ³ |
| Mid-1980s ⁴ | 31.7 | 39.8 | 27.8 | 34.3 | 3.9 | 5.5 |
| Mid-1990s ⁵ | 36.9 | 43.9 | 29.5 | 36.5 | 7.4 | 7.4 |
| Around 2000 ⁶ | 41.0 | 47.2 | 31.4 | 38.1 | 9.6 | 9.1 |
| Change, mid-1980s to 2000 | | | | | | |
| Percentage points | 9.3 | 7.4 | 3.6 | 3.8 | 5.7 | 3.6 |
| Per cent | 29.3 | 18.6 | 12.9 | 11.1 | 146.2 | 65.5 |

1. Percentage point difference between the Gini coefficients for market income and disposable income.

2. As reported in the OECD comparative estimates (Förster and Mira d'Ercole, 2005), which for Japan uses the data from the *Comprehensive Survey of Living Conditions* by the Ministry of Health, Labour and Welfare.

3. The *Survey on the Redistribution of Income* by the Ministry of Health, Labour and Welfare

4. 1984 for Japanese estimate. 1985 for OECD estimate.

5. 1993 for Japanese estimate. 1994 for OECD estimate.

6. 1999 for Japanese estimate. 2000 for OECD estimate.

Source: The OECD comparative estimates based on the *Comprehensive Survey of Living Conditions* are reported in Förster and Mira d'Ercole (2005).

6. The Gini coefficients from the *Comprehensive Survey of Living Conditions of the People on Health and Welfare* and the *Survey on the Redistribution of Income* are higher than the other two estimates shown in Figure A1. This reflects the fact that the *Family Income and Expenditure Survey* and the *National Survey of Family Income and Expenditure* by the Ministry of Internal Affairs and Communications exclude single-person households. The two Surveys by the MHLW thus give a more complete picture of trends in inequality.

The impact of taxes and social spending on income distribution

7. Using the *Survey on the Redistribution of Income*, it is possible to distinguish between the impact of taxes and social spending on income distribution. The redistributive effect of the tax system has been relatively small and declining since 1993. In contrast, the impact of social spending is much larger and has been increasing. To some extent, this result, which is for the entire population, reflects the influence of rising pension outlays.

Gross versus net public social spending

8. The tax system affects social expenditure through several channels (Table A2):

- *Direct taxation*, including social security contributions paid on cash transfers. In Japan, direct taxes on cash benefits are low, reflecting reduced taxation of pension benefits and the exemption of child, unemployment and social assistance benefits.
- *Indirect taxation* levied on goods and services bought by benefit recipients. The value-added tax (the consumption tax) in Japan is set at 5% compared to rates between 13% and 21% in most European countries.

- *Tax breaks* with a social purpose, such as tax expenditures for families with children and favourable treatment of contributions to private health plans. Such tax breaks amount to 1% of GDP in Japan.

Table A2. Net public social spending in OECD countries
Per cent of GDP in 2001

| | Japan | United States | OECD average ¹ |
|--|-------|---------------|---------------------------|
| 1 Gross public social spending | 16.9 | 14.7 | 20.4 |
| 2 Direct taxes ² on cash benefits | 0.2 | 0.5 | 1.2 |
| 3 Indirect taxes on cash benefits | 0.6 | 0.3 | 1.8 |
| 4 Net direct public social spending 4 = 1 – 2 – 3 | 16.1 | 13.9 | 17.4 |
| 5 Net tax breaks | 1.0 | 2.0 | 0.5 |
| 6 Net public social spending 6 = 4 + 5 | 17.1 | 15.9 | 17.9 |

1. Average of 23 countries. Greece, Hungary, Luxembourg, Poland, Portugal, Switzerland and Turkey are not included.

2. Includes social security contributions.

Source: Adema and Ladaique (2005).

9. Direct and indirect taxation has a relatively small impact in Japan, reducing social expenditure by 0.8% of GDP, compared to an OECD average of 3% (Table A2). In particular, such taxes reduced social expenditure by between 5½ and 7½ per cent of GDP in Denmark, Finland and Sweden. In addition, tax breaks with a social purpose are 1% of GDP, twice as high as the OECD average. In sum, the tax system substantially narrows the gap in public social spending between Japan and other countries.

Relative versus absolute poverty³⁷

10. The choice of the poverty threshold - the income threshold below which a person is considered poor - crucially affects the calculation of poverty rates. Two categories of thresholds are commonly used:

- Absolute poverty* based on the cost of a basket of basic “necessities”. The threshold of poverty is constant over time in real terms.
- Relative poverty* based on a percentage of an indicator of the average “standard of living”, typically the median (or the mean) of the entire distribution. The threshold of poverty is allowed to change over time.

Both approaches have benefits and drawbacks. An advantage of absolute poverty is that it more closely reflects the evolution of the standard of living of poor persons.³⁸ From a policy perspective, absolute thresholds provide a fixed target for social assistance programmes, which facilitates the assessment of anti-poverty policies.

11. However, the calculation of absolute poverty thresholds confronts difficult conceptual and statistical issues, especially when international comparisons are involved. *First*, it is unclear that basic necessities are identical across countries. *Second*, international comparisons of absolute thresholds require “appropriate” exchange rates, typically some type of purchasing-power-parity (PPP) exchange rate. While

37. This section draws on Burniaux *et al.* (2006).

38. For example, a broad-based drop of income across deciles would raise poverty rates calculated with absolute thresholds but would leave unchanged those calculated using relative thresholds.

PPP exchange rates have been calculated to compare GDP or national consumption levels in different countries, they are not appropriate for comparing poverty cut-offs.³⁹ *Third*, the choice of a price index to update absolute thresholds within each country also raises further difficulties.⁴⁰

12. Because of the conceptual and statistical issues involved in the calculation of absolute poverty measures, most international studies rely on relative poverty measures. This paper as well focuses on the level of relative poverty, using 50% of median income as the threshold. It should be noted that an increase in relative poverty may result from a rise in average income, which does not imply a deterioration of the living standard of the poor.

39. For example, food is less expensive in the United States than in other OECD countries. As the share of food in the expenditures of poor persons is higher than that of the average household, the use of the PPP exchange rate to convert the absolute thresholds of different countries into a common unit would overstate US absolute poverty compared to other OECD countries.

40. Absolute poverty thresholds are usually updated using the overall consumer price index (CPI). However, the growth rate of the overall CPI index is an imperfect indicator of the increase of living costs for low-income families as their expenditure pattern is different from that of average households.

Annex 2

The development of social spending in Japan

1. The development of the social welfare system in Japan is based on Article 25 of the 1947 Constitution:

- a) All people shall have the right to maintain minimum standards of wholesome and cultured living.
- b) The State must make efforts to promote and expand social welfare, social security and public health services to cover every aspect of the life of the people.

The major steps were the introduction of public pension and health insurance systems in 1961 and long-term nursing care insurance in 2000. In 1972, family and child allowances were introduced, followed by the introduction of price indexation for pensions, as well as increases in the coverage and payments for pension programmes and health insurance in 1973. The following year, unemployment insurance, introduced on a limited scale in 1947, was expanded into the Employment Insurance System.

2. However, the initial momentum towards the development of an extensive social safety net was subsequently slowed by a variety of factors. *First*, 1973 marked the end of the high-growth era, encouraging a more modest vision of government's capacity to provide social welfare. *Second*, government budget deficits ballooned in the 1970s and again in the 1990s, prompting spending restraint. *Third*, as the speed of population ageing became apparent, the plans for the development of the safety net became less ambitious. *Fourth*, the traditional roles played by families and firms and the high household saving rate limited the perceived need for public welfare programmes (Tachibanaki, 2000).

3. Public social spending remained fairly constant at around 11% of GDP from 1980 until 1991 in the context of low unemployment and a relatively young population (Figure 3). However, it increased significantly to almost 17% during the 1990s, while the average level in the OECD area was about the same in both 1990 and 2000. About two-thirds of the rise in social spending as a share of GDP in Japan was due to outlays for pension and survivor benefits (Panel B). Health spending, an area also driven in part by population ageing, accounted for most of the remaining increase.

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