

METHODOLOGICAL NOTE

The Case for an Expenditure-Based Poverty Line for the Newly Industrialized East Asian Societies*

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Is measuring poverty an exercise in the art of the possible? Could we have a poverty line which captures both the absolute and relative elements of poverty in one measure? This paper argues for the use of a poverty line for measuring poverty in newly industrialized East Asian societies that is expenditure-based. We present a number of arguments for the expenditure poverty measure, an alternative to the prevalent and popular measures—absolute and relative poverty. Special reference is made to the social and economic context in East Asia. The case example

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of Hong Kong is used to demonstrate that the expenditure-based poverty line is a more reliable and sensitive measure. More importantly, this research offers a tool which determines a strategy for social expenditures in terms of poverty alleviation that is in line with a society's social and economic context.

KEYWORDS: poverty measure; poverty line; poverty indicators; East Asia; Hong Kong.

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Given the wealth of studies on poverty measures, one can easily get confused about how to select the right tool for measuring poverty in one's own society. Orshansky, an expert who set the American poverty line more than four decades ago, suggested that "poverty, like beauty, lies in the eyes of the beholder."¹

Is measuring poverty an exercise in the art of the possible? At one end of the spectrum, there is an approach to the study of poverty which uses subjective perception as a measuring tool. The Leyden, or subjective, poverty line is such a case—it asks the respondents what is the family or household income they consider to be absolutely minimal, a line below which a family cannot make ends meet.² The use of subjective perception in measuring poverty reflects the importance of the relative definition of poverty in poverty measures. In the study of poverty, definitions of poverty are broadly classified in two groups: absolute and relative.³ There is always a case to be made for including an absolute definition in any poverty measure, however, as poverty must reflect material deprivation.

¹Mollie Orshansky, "How Poverty is Measured," *Monthly Labour Review* 92, no. 2 (1969): 37.

²See Arie Kapteyn, Peter Kooreman, and Rob Willemse, "Some Methodological Issues in Implementation of Subjective Poverty Definitions," *Journal of Human Resources* 23, no. 2 (1998): 222-42.

³For a general discussion of definitions, see Jean Olson Lanjouw, *Demystifying Poverty Lines*, Poverty Reduction Series, United Nations Development Programs (UNDP) (New York: UNDP, 2000); and Patricia Ruggles, *Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy* (Washington, D.C.: The Urban Institute Press, 1990).

A poverty line would become arbitrary if it *only* had a subjective component. On the other hand, poverty is a concept which is always moderated by time and space. What we mean by poverty in today's developed economies is profoundly different from what it meant a century ago: lack of access to an automobile or truck in rural areas may be considered a mark of poverty in the West today, but was certainly not so considered then. Hence, the context—i.e., time and space—is what matters in poverty measures. This paper thus argues for the use of the expenditure-based poverty line as an alternative way of measuring poverty for the newly industrialized East Asian societies, because this approach includes both the absolute and relative definitions of poverty in one measure. The case of Hong Kong is used for illustration.

In East Asia, the export-led industrialization approach to economic development produced rapid growth rates in the postwar period, leading to general rises in per capita income. The rapid growth rate in the region persistently exceeded 5 percent per annum between the 1960s and the mid-1990s. This economic achievement outperformed the corresponding growth rates in the world's other industrial nations such as the United States, the United Kingdom, Canada, and Sweden.⁴

Nevertheless, large-scale economic growth does not mean that the countries in the region—even those with the most remarkable growth rates—have gotten rid of poverty.⁵ The Asian financial crisis in 1997 and the worldwide economic downturn in 2001 reversed the optimism of the early 1990s about growth-induced/poverty-reduction strategies. For example, although abject poverty was no longer a worry in Singapore during this period, government poverty agents still would monitor households in the bottom 20 percent.⁶ In Hong Kong, the number of households receiving

⁴See Kwong-leung Tang and James Midgley, "Social Policy after the East Asian Crisis: Forging a Normative Basis for Welfare," *Journal of Asian Comparative Development* 1, no. 2 (Winter 2002): 303-4.

⁵Kwong-leung Tang and Chack-kie Wong, eds., *Poverty Monitoring and Alleviation in East Asia* (New York: Nova, 2003), 6-7.

⁶Mui-teng Yap, "Poverty Monitoring and Alleviation in Singapore," *ibid.*, 78-79.

social assistance rocketed from 136,201 in 1996 to 252,675 in May 2002, an increase of 85.5 percent over a six-year period.⁷

The Case for the Use of the Expenditure-Based Poverty Line

If poverty is unlikely to go away in the newly industrialized East Asian societies, we must seek to establish the most appropriate poverty measure for the region. Such a measure is important in that it provides an objective benchmark to gauge the changes in poverty over time, telling us who are the poor and who are not. For example, it is alarming to know that low-income households in Hong Kong had increased from 15 percent in 1996 to 18.3 percent in 2000, whereas the percentages of children and elderly living in low-income households had also increased from 22.8 percent and 26.9 percent in 1996 to 25.9 percent and 34.3 percent in 2000, respectively.⁸ However, these shocking statistics may not be very helpful if they are not the results of an objective poverty measure; this is because low income is not necessarily equal to poverty. Any statistician knows that there are always quartiles of households falling into the low-income category in any statistical distribution. Hence, countries must have an objective measure so that poverty is not conceptually confused with income inequality. Knowing the differences in poverty levels in different regions and socioeconomic and demographic groups within a society is essential for effective policymaking, for the targeting of social wage transfers, and for determining a strategy for social expenditures in line with a country's social and economic conditions.⁹

⁷Sammy Chiu, "Poverty, Vulnerability, and the Expansion of Disciplinary Welfare in Hong Kong," *ibid.*, 67.

⁸Hong Kong Council of Social Service, *Social Development Index 2002 and 1997-2002 Social Development Review* (in Chinese) (Hong Kong: Hong Kong Council of Social Service, August 2002). It is pity that there is no indication in the report of how low-income is defined.

⁹Lanjouw, *Demystifying Poverty Lines*, 3.

Relative deprivation measures for defining poverty are one of the keys to making such distinctions.¹⁰ Such measures inform us about the extent of relative poverty, that is, about those households which lack, or are inadequate in terms of, a life-style which accords with the normal standards in society. Indeed, a life-style definition of poverty may reflect social inequality rather than poverty. The poor may not be materially deprived in terms of a lack of basic necessities; they may be those who have a life-style which, against their wishes, falls short of that of their fellow citizens.

Needless to say, social inequalities are a legitimate and important issue to address when aiming for the achievement of social solidarity. Using relative measure as a "supplement" to our understanding of poverty is also useful but it cannot supplant the absolute notion of poverty.¹¹ In this light, a poverty measure which says more about inequality than poverty is not necessarily an appropriate tool for policymaking if the idea of poverty lacks the absolutist core. Therefore, it is conceptually imperative to differentiate social inequality from poverty.

One can also use an income-based poverty line. Such a measuring tool, reflecting relative poverty, is not useful if one wants to monitor poverty over time or space—there is always a group of people who are relatively poor even when the economic standards of a society have improved over time.¹² The principal problem with the income-based poverty line is that it is a definition of inequality rather than poor conditions.¹³ Because of this nature, this relative definition may lead to an unacceptable situation: George and Howards, two international experts on poverty studies, have stated that "since the vast majority of the population in a country are ill-fed, ill-housed, ill-clothed, and ill-educated, etc., the majority of the population

¹⁰Peter Townsend, *Poverty in the United Kingdom* (Harmondsworth: Penguin Books, 1979).

¹¹Amartya K. Sen, *Poverty and Famine: An Essay on Entitlements and Deprivation* (Oxford: Clarendon Press, 1981), 22.

¹²Lanjouw, *Demystifying Poverty Lines*, 3.

¹³Amartya K. Sen, "Poor, Relatively Speaking," *Oxford Economic Papers* 35 (1983): 157; and Paul Spicker, *Poverty and Social Security* (London: Routledge, 1993), 54.

cannot be in poverty" if the area in question is a least developed country.¹⁴ In other words, a poverty measure should have an absolutist core.¹⁵ Moreover, there already exist good measures for income inequality, such as Gini coefficients and inequality ratios. Hence, differentiating poverty from income inequality is desirable.

Despite these limitations, the income-based poverty line is widely used in developed societies—especially in OECD countries and in the European Union—for comparative studies of poverty.¹⁶ There have also been some applications to East Asian societies. For instance, the Luxembourg Income Study, a research network which focuses primarily on poverty in the West, also includes Taiwan in its comparative analysis.¹⁷ Two affluent cities in China—Guangzhou (廣州) and Shanghai (上海)—were also selected for testing the appropriateness of the use of the income-based poverty line in a Third World setting in the 1990s.¹⁸ The threshold adopted for poverty is normally 40 percent, 50 percent, or 60 percent of the mean or median household or family income. Recently, Eurostat, an EU research institute, used 60 percent as the poverty threshold.¹⁹ This, perhaps, reflects a greater concern for achieving social equality—a higher threshold indicates that a greater number will be counted as poor, and as a result the government will more likely be compelled to take necessary action. Apparently, income-based poverty line is a good measure of inequality. Measuring by income alone may not, however, provide sufficient

¹⁴Vic George and Irving Howards, *Poverty Amidst Affluence* (Hants: Edward Elgar, 1991), 10.

¹⁵Sen, "Poor, Relatively Speaking," 162.

¹⁶This relative poverty measure was first developed by Victor Fuchs, "Redefining Poverty and Redistributing Income," *The Public Interest* 8 (1967): 88-95, and then later adopted by OECD.

¹⁷See, for example—LIS Key Figures about Taiwan's relative poverty rates. www.lisproject.org/key_figures/povertytable.htm.

¹⁸Chack-kie Wong, "Measuring Third World Poverty by the International Poverty Line: The Case of Reform China," *Social Policy and Administration* 29, no. 3 (1995): 189-203; and Chack-kie Wong, "How Many Poor People in Shanghai Today? The Question of Poverty and Poverty Measure," *Issues & Studies* 33, no. 2 (1997): 32-49.

¹⁹Eurostat, *European Community Household Panel Survey: Selected Indicators from 1995 Wave* (Luxembourg: Eurostat, 1999).

empirical evidence of poverty. In this light, performing supplementary tests—such as for the presence of hardship indicators in those whose income is below the poverty line—is often necessary.

An alternative to using income in poverty measures is to use expenditure. Income and expenditure are different poverty measures because the latter represents the actual command over resources: households can save part of their income; they can borrow, if they do not have enough income; or they can use their savings, if they have any. The factor of savings is particularly relevant to the newly industrialized societies in East Asia, because these countries have higher savings rates as compared with the rest of the world. For instance, Hong Kong, Singapore, Taiwan, and South Korea had savings rates of 30, 51, 26, and 34 percent, respectively, in 1998; these rates were all higher than the world average of 21 percent in the same year.²⁰ This means that an income-based poverty line cannot capture the part of income kept by households as savings.

In East Asia, the high savings rate is probably due to the late development of their social security systems; people have become accustomed to saving a substantial part of their income in order to help them cope with the risks they must face in life, an essential strategy in an agrarian economy. As social security systems mature, people may not need to save at present levels. Apparently, this high savings rate phenomenon has significant implications for poverty measures. This is because an income-based poverty line is likely to capture the income portion (which is put aside as savings by the rich and the average households) yet is also included when calculating poverty. Therefore, an income-based poverty line is likely to exaggerate the extent of poverty in an economy with high savings rates.

The expenditure-based poverty line reflects not only the command over resources but also the need to consume—the absolute element in the definition of poverty. Apart from this feature, the expenditure-based poverty line can "reflect differences in relative prices due to national, cul-

²⁰Source: Japanese Ministry of Finance (2000), "Economic Indicators of Asian Countries," <http://www.mof.go.jp/english/if/022h.htm> (accessed January 20, 2004).

tural, climatic, or other factors."²¹ This is so because the expenditure of a household is culturally and socially defined: people—irrespective of income level—take account of the social and cultural needs of a society in their expenditure patterns. Moreover, the economic standard is an important "other factor." For example, even the poor in a developed economy can afford expensive foods such as meat, which is unlikely the case for their counterparts in poor countries. Therefore, the expenditure-based poverty line has included both the absolute and relative definitions of poverty in one measure. This measure is appropriate for the majority of East Asian societies because most of their people can save much of their income upon attaining high economic standards.

Moreover, such absolute measures of poverty as the one proposed by the World Bank—one to two U.S. dollars as the proxy for basic daily nutrition needs²²—are not appropriate for these societies because of their high economic standards. For instance, in 1999 the per capita (purchasing price parity) GDP of Hong Kong, Singapore, and South Korea were US\$22,090, US\$20,767, and US\$15,712, respectively; these levels are comparable with many affluent societies in the West.²³

On the basis of the above brief discussion, we suggest that there are three credible reasons for the use of the expenditure-based poverty line in East Asia's newly industrialized societies. First, absolute measures of poverty do not capture the high economic standards in these societies. The poor will not be able to share the fruits of economic growth if an absolute poverty measure informs poverty alleviation policy. Second, relative poverty measures such as the income-based poverty line may reflect income inequalities, but do not reflect poverty; hence, they are not the best meas-

²¹Peter Saunders, Jonathan Bradshaw, and Michael Hirst, "Using Expenditure Data in the Measurement of Poverty: A Comparison of Australia and the United Kingdom" (Paper presented at the 26th General Conference of the International Association for Research in Income and Wealth, Cracow, Poland, August 27 to September 2, 2000).

²²World Bank, *Implementing the World Bank's Strategy to Reduce Poverty: Progress and Challenges* (Washington, D.C.: World Bank, 1993).

²³United Nations Development Program, *Human Development Report 2001* (New York: 2001), 141.

ures to adopt for targeting limited resources for poverty alleviation. Third, expenditure-based poverty measures are more appropriate because these societies have high savings rates; this is probably a legacy of an agrarian economy, the lack of social protection, or a combination of both of these factors. Therefore, the expenditure-based poverty line, which reflects the actual consumption pattern, should be more appropriate for the newly industrialized East Asian societies.

The following case study of two different poverty lines at two different periods of time in one of the tiger economies—Hong Kong—will illustrate the case for using the expenditure-based poverty line in measuring poverty.

The Case Study of Hong Kong

This study used 1 percent data sets from the 1996 and 2001 population census and a 10 percent data set from the 1994/95 and 1999/2000 household expenditure surveys, both provided by Hong Kong's Census and Statistical Department.²⁴ This means that four sets of data were available for our secondary data analysis in making the case for the use of the expenditure-based poverty line in the context of newly industrialized societies in East Asia.

With the benefit of general household survey data, we were able to measure poverty in terms of expenditure, rather than simply income, from the census data. Three measure points were used—40 percent, 50 percent, and 60 percent of the median income and expenditure—to construct three different poverty lines. Hence, we could have two poverty lines, income- and expenditure-based, each with three thresholds at one period of time. In sum, twelve poverty measures were taken on two poverty lines, with three different thresholds, at two periods of time. The 1996 and 2001 measures

²⁴The researchers obtained authorization from the Census and Statistical Department of the Hong Kong government to use the respective census and household survey data for cross-tabulation. The results had to be verified before publication.

were used for the income-based poverty line, while the 1994/95 and 1999/2000 measures were used for the expenditure-based lines.

Table 1 shows different poverty population and poverty rates in Hong Kong as measured by the income-based poverty line at two periods of time—1996 and 2001. According to the census, the median household income was HK\$17,500 (HK\$7.8=US\$1.0) in 1996 and HK\$18,705 in 2001. If we use 50 percent of the median household income as the poverty line, then those households with monthly income less than HK\$8,750 in 1996 and HK\$9,353 in 2001 are classified as households in poverty. Using this 50 percent median household income poverty line, we estimate that the poverty rate in Hong Kong was 20.3 percent²⁵ in 1996 and increased to 21.9 percent in 2001—for a change of 1.6 percentage points in the poverty rate. The households living under this poverty level also increased from 376,200 in 1996 to 447,035 in 2001. The largest increase is on the 40 percent income-based poverty line, which showed a 2.7 percentage points increase in the poverty rate, from 13.4 percent in 1996 to 16.1 percent in 2001. The 60 percent income-based poverty line experienced the same increase in poverty rates as did the 50 percent poverty line.

The increase in income poverty measures is an echo of the widening income gap in Hong Kong. This is because, during the same period, the Gini coefficient (which measures income disparity) increased from 0.518 in 1996 to 0.525 in 2001. In terms of income, the lowest 20 percent income households had only 3.7 percent of the total household income in 1996; this meager share dropped even further to 3.2 percent in 2001, however, while the top 20 percent households remained at approximately the same level at 56.3 percent in 1996 and 56.5 percent in 2001.²⁶ Apparently, the lowest

²⁵The figure is slightly higher than the 18.85 percent estimated by Tai-ki Mok and Shing-on Leung, *Hong Kong Poverty Rate*, Series on Social Security Research #15 (Hong Kong: Hong Kong Social Security Society, 1997). The reason is that Mok and Leung used the median of per capita household income, while we use the total expenditure of the whole household. We assume that household income is shared among household members, and adopt the household rather than individual as the unit of analysis, a practice which is in line with construction of the international poverty line.

²⁶See census reports of various years, Hong Kong Census and Statistics Department; and Chiu, "Poverty, Vulnerability, and Expansion of Disciplinary Welfare in Hong Kong," 65.

Table 1
Poverty Population and Poverty Rate in Hong Kong as Measured by
Income-Based Poverty Lines, 1996 and 2001

	1996				2001			
	HK\$	No. of households	Poverty Rate		HK\$	No. of households	Poverty rate	Change in poverty rate
Median Household Income	<40%	<7,000	248,822	13.4%	<7,482	328,772	16.1%	+2.7%
	<50%	<8,750	376,200	20.3%	<9,353	447,035	21.9%	+1.6%
	<60%	<10,500	508,789	27.4%	<11,223	591,335	29.0%	+1.6%

income households were somewhat worse off even though, in the same period, people—generally speaking—enjoyed increases in their income. We will elaborate on this in a later section. In other words, the income-based poverty line is sensitive to income disparity.

Thus, if we measure poverty on the basis of household income, poverty in Hong Kong is disturbing. However, poverty should not be equal to income disparity.²⁷ If poverty and income inequality are identical concepts, as we have argued above, we do not need to separate them. Apparently, the increase in poverty between 1996 and 2001 in Hong Kong might only explain the corresponding increase in income inequality due to the relative nature of an income-based poverty line.

Looking at the economic reality of the period reveals that the increase in poverty on the basis of the income measure does not reflect people's actual purchasing power. During that time, the nominal median household income ranged from HK\$17,500 in 1996 to HK\$18,705 in 2001, a nominal growth rate of 6.9 percent. Taking deflation into consideration, the real growth rate in household income was 7.9 percent.²⁸ People in general therefore benefited from an increase in nominal and real household in-

²⁷Sen, "Poor, Relatively Speaking," 153-69.

²⁸Between 1996 and 2001, the composite consumer price index decreased from 98.7 in 1996 to 97.8 in 2001. For the composite consumer price index re-based in 1999/2000, the figure was adjusted according to the base in 1994/95. Sources: Hong Kong Census and Statistical Department, *Annual Digest of Statistics*, various issues.

Table 2
Poverty Population and Poverty Rate in Hong Kong Measured by
Expenditure-Based Poverty Lines, 1994/95 and 2000/01

	1994/1995				2000/01			
	HK\$	No. of households	Poverty Rate		HK\$	No. of households	Poverty rate	Change in poverty rate
Median	<40%	<5,844	156,542	10.3%	<6,984	136,912	8.4%	-1.9%
Household	<50%	<7,305	241,335	15.9%	<8,731	214,034	13.2%	-2.7%
Income	<60%	<8,766	341,939	22.6%	<10,477	311,284	19.2%	-3.4%

come. An ironic picture unfolds: while more people were living in poverty according to income measures, they enjoyed greater purchasing power. The increase in purchasing power in a deflationary scenario was exactly the argument put forward recently by the government of Hong Kong in support of a cut of social assistance benefits.²⁹ Apparently, the income-based, relative poverty line is out of touch with economic reality.

We now turn to examine the expenditure-based poverty line in the case of Hong Kong. Table 2 shows the different poverty population and poverty rates by expenditure poverty measures in Hong Kong in 1994/95 and 2000/01. According to the household expenditure surveys, the median household expenditure was HK\$14,610 in 1994/95 and increased to HK\$17,462 in 1999/2000. Correspondingly, the 40 percent threshold of the expenditure-based poverty line was HK\$5,844 per month in 1994/95, increasing to HK\$6,984 in 1999/2000. The increase in the amount in expenditures of the three respective expenditure thresholds indicates an improvement in the livelihoods of the households in poverty in accordance with expenditure measures.

Using the expenditure-based poverty line, for 1994/95 we arrived at 10.3 percent, 15.9 percent, and 22.6 percent of households in poverty,

²⁹Between 1997 and 2002, a deflationary rate of 11.1 percent in consumer price was recorded in Hong Kong. The corresponding cut in social assistance benefits was matched, however, with protest from social advocacy groups which claimed that the poor had a different expenditure pattern—the prices of electricity, water, and transportation had not been reduced in line with other consumer goods.

respectively constituting the 40 percent, 50 percent, and 60 percent thresholds of median household expenditure. In 1999/2000, the poverty rates were 8.4 percent, 13.2 percent, and 19.2 percent, respectively, for the three poverty thresholds. This suggests that there were significant decreases in poverty between the two periods: 1.9 percentage points using the 40 percent threshold, 2.7 percentage points using the 50 percent threshold, and 3.4 percentage points using the 60 percent threshold. Clearly, calculating poverty measures by expenditure not only yielded lower poverty rates and population but also an increase in economic standards between the two different time periods.

In conclusion, in the case of Hong Kong, contradictory findings emerged regarding the different conditions of poverty in two different periods, using different poverty lines. Using income-based poverty measures, we found an increase in the poverty rate and the proportion of the population living in poverty; using an expenditure-based line, we found a reduction in the same figures. This begs the question: which is the more appropriate poverty measure both for Hong Kong and for the larger East Asian societies in general? The key to answering this question depends on the kind of definition one adopts for poverty—that is to say, whether one is interested in absolute or relative poverty.

In 1955, Orshansky defined households in poverty as those in which one-third of their expenditure was on food.³⁰ Over the years, the U.S. government has followed this criterion with only minute adjustments. The one-third ratio of food expenditure as a percentage of total household expenditure appears to be an objective measure for indicating absolute poverty, since the consumption of food is quite inelastic. In other words, the share of food in household expenditure can be interpreted as a hardship indicator, which is very important in any definition of poverty.

Table 3 clearly illustrates that all three expenditure-based poverty lines contain the hardship component. For example, the percentages of food expenditure to total household expenditure are 45.5 percent, 45.0

³⁰Orshansky, "How Poverty is Measured," 37-41.

Table 3

Food and Housing Expenses as Percentage of Household Total Expenditure and Expenditure-Based Poverty Line in Hong Kong (1994/95 & 1999/2000)

Median Household Expenditure	1994/95			1999/2000		
	HK\$	Food as % of total household expenditure	Food and housing expenses as % of total household expenditure	HK\$	Food as % of total household expenditure	Food and housing expenses as % of total household expenditure
<40%	5,844	45.5	73.8	6,984	39.5	69.3
<50%	7,305	45.0	71.9	8,731	39.3	67.1
<60%	8,766	45.2	70.5	10,477	38.2	65.8
All Households	14,611	34.5	63.9	17,461	29.0	60.2

percent, and 45.2 percent for the 40 percent, 50 percent, and 60 percent poverty lines, respectively, in 1994/95. With the benefit of increased household expenditure in the year 1999/2000, the corresponding ratios had decreased to 39.5 percent, 39.3 percent, and 38.2 percent, respectively. Compared with the average households in the two periods of time, their food to total household expenditure ratios were 34.5 percent and 29.0 percent, respectively, in 1994/95 and 1999/2000. The latter figures suggest that the population at large were consistently better-off than those households under expenditure measures at the two periods of time under study.

If we extend the "hardship" components in household expenditure to include housing, we then gain an idea of the extent of disposable expenditure available to the households after these two seemingly "inelastic" household expenditure components are taken into account. In this respect, the corresponding ratios of food and housing as a percentage to total household expenditure are 73.8 percent, 71.9 percent, and 70.5 percent, respectively, for the 40 percent, 50 percent, and 60 percent poverty thresholds in 1994/95; they were reduced to 69.3 percent, 67.1 percent, and 65.8 percent,

respectively, in 1999/2000. All households under the different expenditure poverty thresholds seem to have about one-third or less of their expenditure available for discretionary spending, at both measure points, after food and housing expenditures are included. Compared with the average households at the two different time periods, they were still worse off—the average household in Hong Kong had more disposable income, after food and housing were counted. This signifies that the households in poverty according to the different expenditure measures did indeed encounter hardship as compared with their fellow citizens.

Food is the main expenditure component of poor households. Elasticity for this "good" is low. Lack of food will have obvious adverse effects on people's physical health, which relates to the concept of absolute poverty. Moreover, in accordance with our findings, households in poverty appear to be less sensitive to expenditure than to income, because expenditure is more rigid. Hence, anticipating a decrease in income, households in poverty may adopt a number of strategies. First, they may spend as usual if they have enough savings. Second, they may reduce unnecessary expenditure if they do not have such a level of savings. Finally, they may borrow if they cannot dig into their savings in order to maintain a basic standard of living. All these factors suggest that the expenditure-based poverty line is more appropriate because it takes into consideration both the absolute and relative elements of poverty in one measure.

Conclusion

We opened with the quote of Orshansky that poverty, like beauty, lies in the eye of the beholder. Despite this, we believe that social scientists should be able to construct objective and scientific measures for poverty based on conceptual arguments and empirical evidence. This paper has sought to construct a poverty line which is compatible with the social and economic realities in East Asian societies. On the one hand, the high economic growth there has not eradicated poverty. On the other, the "absolute" measures of poverty—such as the World Bank's one to two U.S.

dollars—do not allow the poor to share the growth dividend in poverty alleviation programs, and should be discarded. Based on an empirical comparative study of census and household income and expenditure data, this paper thus argues for the use of an expenditure-based poverty line for these newly emerging economies. An expenditure-based poverty line captures both the absolute and relative elements of poverty in one measure.

An expenditure-based poverty line is a more reliable and sensitive measure for East Asian societies because the people in this region have high savings rates; an income-based poverty line not only fails to capture this important aspect but also exaggerates poverty incidences. Our empirical comparative study of these two poverty lines at two different periods of time in the case of Hong Kong provides valid evidence for this argument. Our finding may not hold good for developed societies with mature social security systems. Nor do we seek to deny that income-based poverty line has its own merits, for it can capture the extent of income inequality in society. We do believe, however, that this type of poverty line needs supplementary empirical evidence to verify the absolutist core in the idea of poverty.

An expenditure-based poverty line is also more reliable because it has embodied the "hardship" factors, the seemingly inelasticity of the need for food and housing; hence, an expenditure-based approach is a better measure than an income-based poverty line, which tends to reflect income inequality alone. However, one may query how far the case for the expenditure-based poverty line can be generalized to other newly industrialized societies in East Asia. We need to be more cautious because, despite their common geographical location (i.e., East Asia) and their tremendous growth records in the 1980s and 1990s, these societies have different approaches to poverty alleviation. For example, South Korea and Singapore were more forthcoming about helping the poor during the Asian financial crisis while Hong Kong took a more conservative approach, lowering benefits levels and requiring able-bodied recipients to seek or take up proper employment before qualifying for welfare. Nevertheless, the Hong Kong example illustrates the merit of a poverty line which captures both absolute and relative poverty in one measure and reduces precious social

expenditure. The reason is clear: there is a substantial difference between income- and expenditure-based poverty lines. The different value between the two poverty lines has implication for social expenditure. For example, in the case of a 50 percent threshold, the difference was 8.7 percentage points or 233,001 households between 2001 (for income) and 1999/2000 (for expenditure), an estimated HK\$14.9 billion (equivalent to US\$1.9 billion) in one year, or 6.12 percent of the total public expenditure in 2000/01.³¹ The financial implications are enormous, especially for the newly industrialized societies whose governments are struggling hard to contain the costs of their country's exports while at the same time trying to establish their own political legitimacy. Hence, an expenditure-based poverty line, which captures both the absolute and relative definitions of poverty in one measure, offers a better way for determining social expenditures.

An income-based poverty line has its own merits, especially in terms of reflecting income inequality and life-style poverty. In this light, societies that wish to know more about the absolutist meaning in poverty should clearly utilize the expenditure-based poverty line for measuring poverty. Of course, an expenditure-based poverty line is, by nature, less sensitive to income inequality. In other words, a society which places a premium on social equality and solidarity—as in the case of EU countries—should instead consult income-based poverty measures.

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³¹This is a rough estimate and is not verified because our income data set is 1 percent and our expenditure data set is 10 percent. The calculation is based on the concept of a poverty gap, that is, the difference in the total household income at the poverty threshold and the total average income of households in poverty. The respective figures for financial implications of the poverty gap are HK\$7,731.9 million for the 50 percent expenditure threshold poverty gap in 1999/2000 and HK\$21,796.9 million for the 50 percent income threshold in 2001. The total public expenditure in 2000/01 was HK\$243.7 billion.

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