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MEASURING LOW INCOME AND POVERTY IN CANADA: AN UPDATE

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EXECUTIVE SUMMARY

Since the early 1970s, Statistics Canada has produced low income rates, based on a measure called the Low Income Cutoff (LICO). In the late 1980s, a second measure, called the Low Income Measure (LIM), began gaining in popularity for certain types of analyses. Both are by design relative measures. Statistics Canada has maintained that neither measure is intended as a poverty line but, in the absence of other measures, they are at times interpreted as such.

There is currently an initiative underway in Canada, sponsored by the provincial and territorial Ministers of Social Services and the federal Human Resources Development Canada, to devise a needs-based measure of poverty called the Market Basket Measure (MBM). The note outlines the existing measures and summarizes the recent developments.

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1. INTRODUCTION

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In recent years, various government initiatives have targeted poverty, particularly child poverty. The most recent effort is a major program entitled the National Child Benefit. Public concern about the suitability of existing measures to monitor the impact of such programs has been growing.

There is currently an initiative underway in Canada, sponsored by the provincial and territorial Ministers of Social Services and the federal Human Resources Development Canada, to devise a needs-based measure of poverty called the Market Basket Measure (MBM). The note outlines the existing measures and summarizes the recent developments.

2. LOW INCOME CUTOFF (LICO)

LICOs are popularly described as the income level where a family will tend to spend a significantly higher proportion of its income on food, shelter and clothing than the average family. When this measure was first developed using 1959 Family Expenditure Survey data, the average household spent 50% of its pre-tax income on food, shelter and clothing. Twenty percentage points were added to this figure, on the rationale that a family spending over 70% of its income on essentials could be regarded as being in “straitened circumstances”. This 70% threshold was then converted to a set of Low Income Cutoffs that vary by family size and community size. They are used in conjunction the Survey of Consumer

Finances, Statistics Canada's household income survey, to monitor trends in the low income population.

Since the LICOs were first introduced, average household spending on food, shelter and clothing has declined from 50% of before-tax income to about 35%. Since 1969, the proportion underlying the LICO calculation has been updated four times to reflect changes in average household spending on food, shelter and clothing. The most recent "rebasing" occurred in 1992. In addition to this periodic "rebasing", LICOs are updated annually using the Consumer price Index.

LICOs are now calculated for use with after-tax as well as pre-tax income. Depending on family size and community size, LICOs for 1996 ranged from $11,839 to $43,634 before tax and from $9,337 to $37,037 after tax (Tables 1 and 2).

Table 1: Pre-tax low income cutoffs, 1996

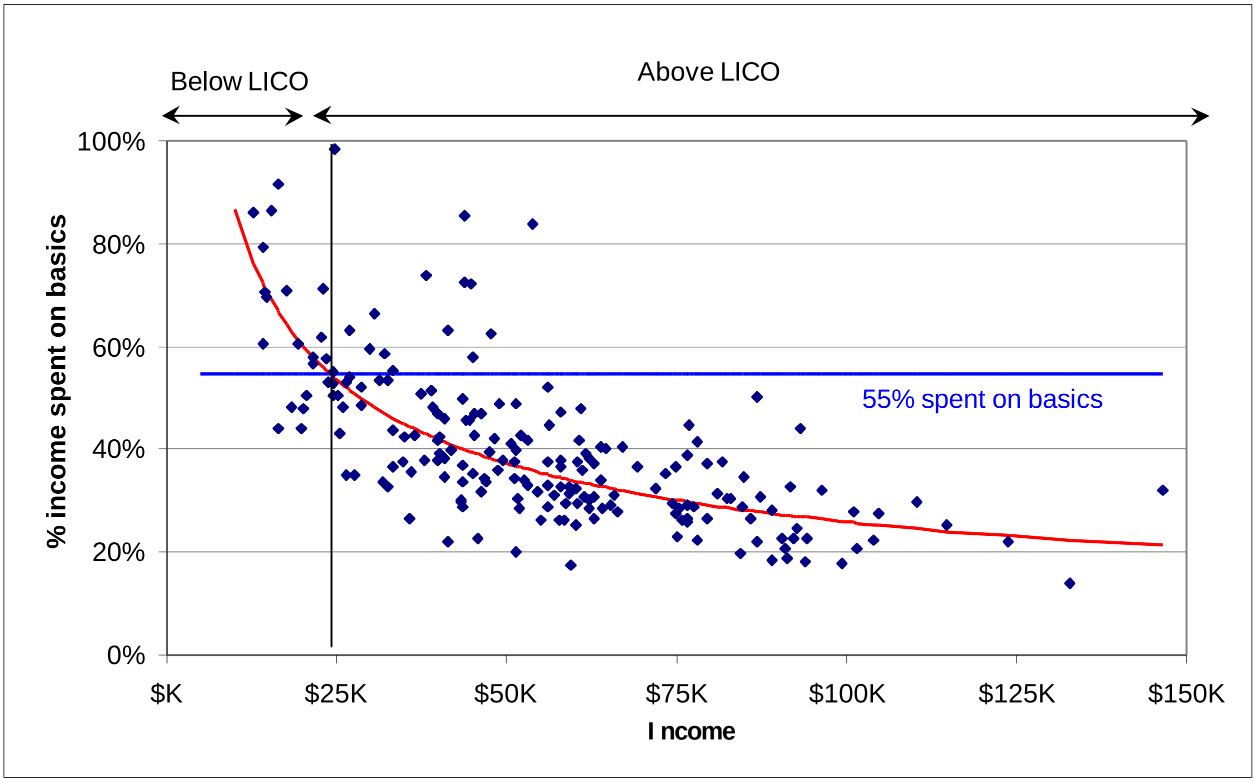
Family size	Community size				
	500,000+	100,000 to 499,999	30,000 to 99,999	Urban area <30,000	Rural area
1	$17,132	$14,694	$14,591	$13,577	$11,839
2	$21,414	$18,367	$18,239	$16,971	$14,799
3	$26,633	$22,844	$22,684	$21,107	$18,406
4	$32,238	$27,651	$27,459	$25,551	$22,279
5	$36,036	$30,910	$30,695	$28,562	$24,905
6	$39,835	$34,168	$33,930	$31,571	$27,530
7 or more	$43,634	$37,427	$37,166	$34,581	$30,156

Table 2: After-tax low income cutoffs, 1996

Family size	Community size				
	500,000+	100,000 to 499,999	30,000 to 99,999	Urban area <30,000	Rural area
1	$14,240	$11,996	$11,811	$10,792	$9,337
2	$17,376	$14,637	$14,411	$13,169	$11,393
3	$21,977	$18,513	$18,227	$16,656	$14,410
4	$27,373	$23,058	$22,701	$20,744	$17,947
5	$30,595	$25,771	$25,372	$23,185	$20,059
6	$33,816	$28,484	$28,044	$25,627	$22,172
7 or more	$37,037	$31,198	$30,714	$28,067	$24,285

Chart 1 illustrates how a LICO is calculated, using a family of four living in a mid-size city in 1992 as an example. The 55% line represents the average proportion of income spent on food, shelter and clothing (35% in 1992, taken over all households), plus 20 percentage points. The points on the diagram show actual percentages of income spent on essentials by families of four in mid-size cities, based on the 1992 Family Expenditure Survey. A regression line is fitted to the distribution and the intersection of that curve and the 55% line defines the LICO – in this case, about $25,000. (The value has since risen because of annual adjustments using CPI.)

Chart 1: LICO calculation for family of four in city of 30,000 to 100,000 population

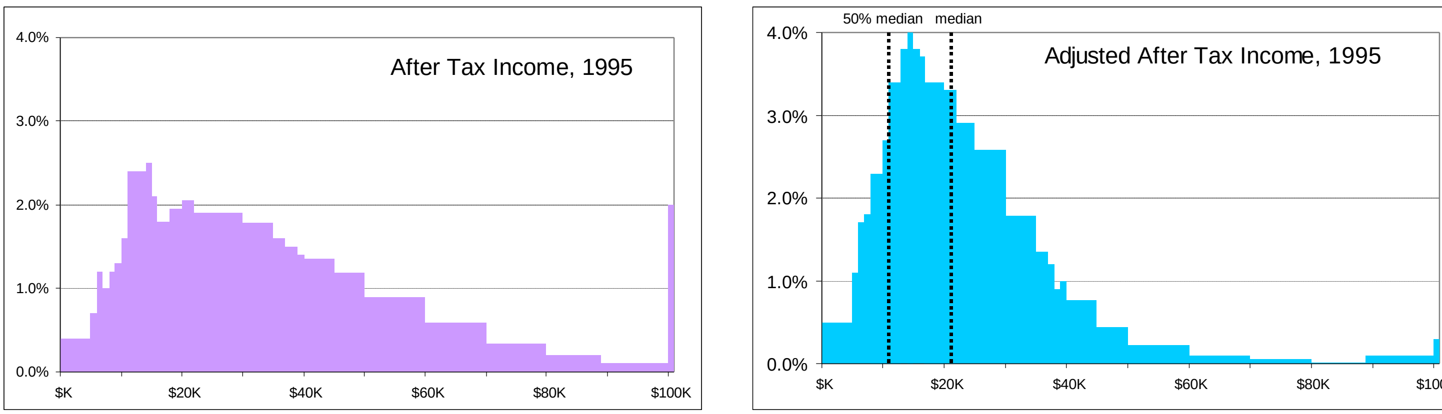


3. THE LOW INCOME MEASURE (LIM)

The LIM is defined as 50% of median income, adjusted for family size and composition using an equivalence scale. The scale in question uses a weight of 1 for the first family member and 0.4 for the second family member, regardless of age. The third and subsequent family members are assigned a weight of 0.4 if they are aged 16 or over and 0.3 if they are below age 16. Unlike the LICO, there is no differentiation by community size.

Chart 2 shows, on the left, the 1995 distribution of family income after tax, without any adjustments for family size. On the right is the distribution adjusted using the equivalence scale. Half of the median is $10, 537, which is the LIM for an unattached individual. LIMS can then be calculated for different types of families.

Chart 2: Calculating the Low income Measure

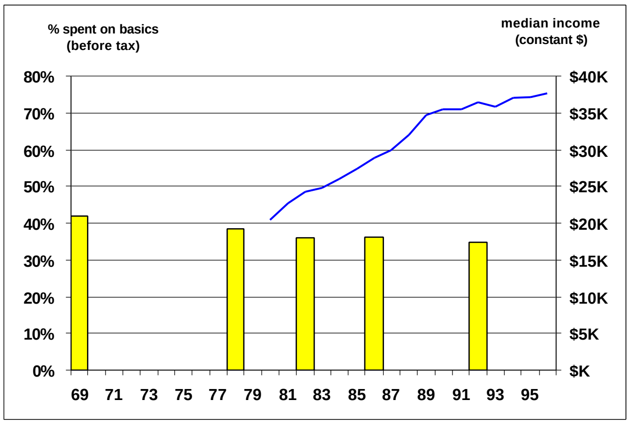


4. RECENT TRENDS IN THE LICOS AND LIMS

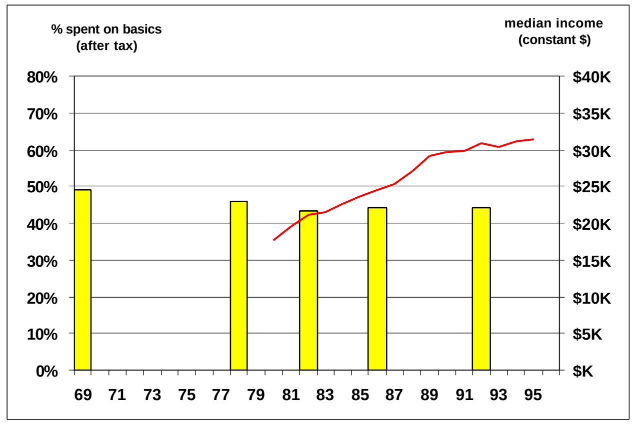
The LICO and LIM are both by design relative measures. With rising average incomes and a declining proportion of average income spent on essentials, the LICOs measured in constant dollars have risen over time (Chart 3). This can be seen in both the before tax and after tax income data.

Chart 3: Median income and proportion of income spent on basics by the average household

Before tax



After tax

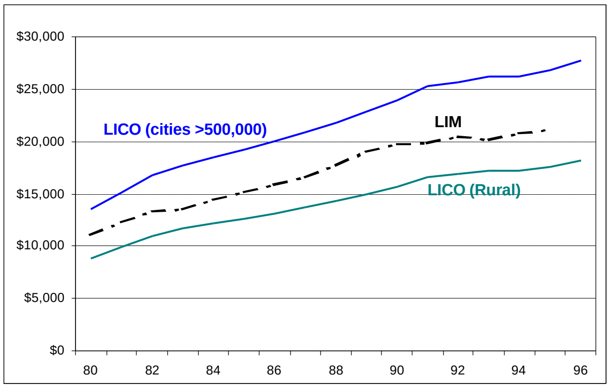


The effect of the increase in median income has more or less been to double the Low Income Cutoffs over the past 15 years, measured in constant dollars. For example, for a family of four in a large city, the after-tax LICO rose from about $14,000 in 1980 to $28,000 in 1995. The patterns are similar for other family sizes.

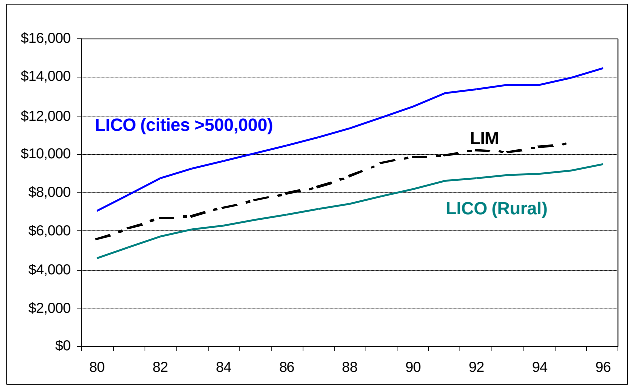
In the case of the LIM, the upward trend is quite similar. Chart 4 shows that the LIM for a family of two adults and two children lies between the LICOs for large cities and rural areas. However, the LIMs are closer to the lower (rural) LICOs, and in absolute dollar terms, the gap between the LICO for large cities and the LIM has grown somewhat. In the case of unattached individuals – a group that has been growing in the Canadian population – the pattern is broadly similar.

Chart 4: LICOs and LIMs, after tax, 1980-1996

Family of 4



Unattached individuals



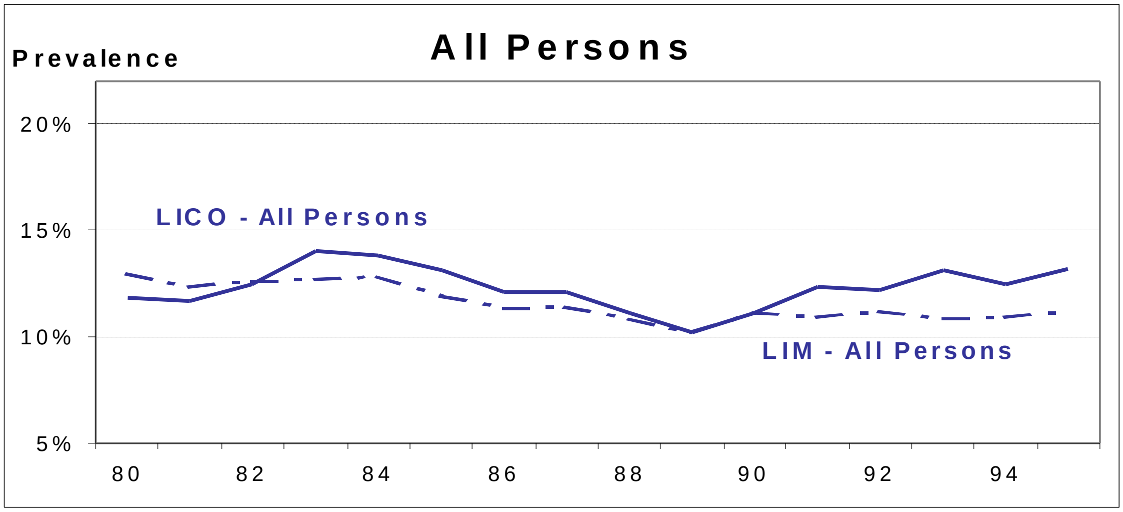
5. TRENDS IN THE PREVALENCE OF LOW INCOME

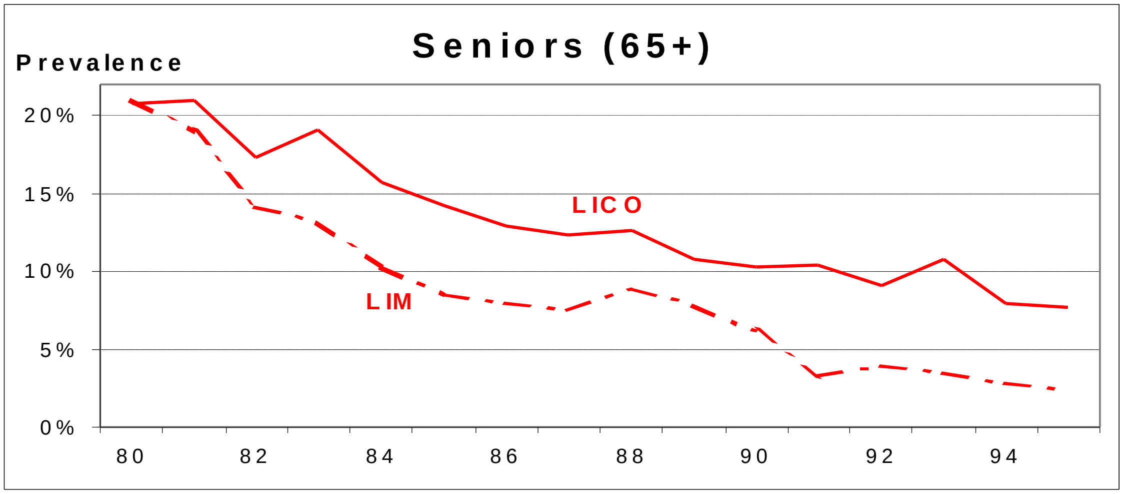
Since 1980, the prevalence of low income after tax has ranged between 10% and 14% of the total population. This measure is based on persons of all ages, and considers the person as being in low income if the total income of his or her family is below the LICO (or LIM, as the case may be). The average rate of low income based on the LIM is generally somewhat lower. While the LICO-based and LIM-based trends are similar, there appears to be a divergence in the 1990s (Chart 5).

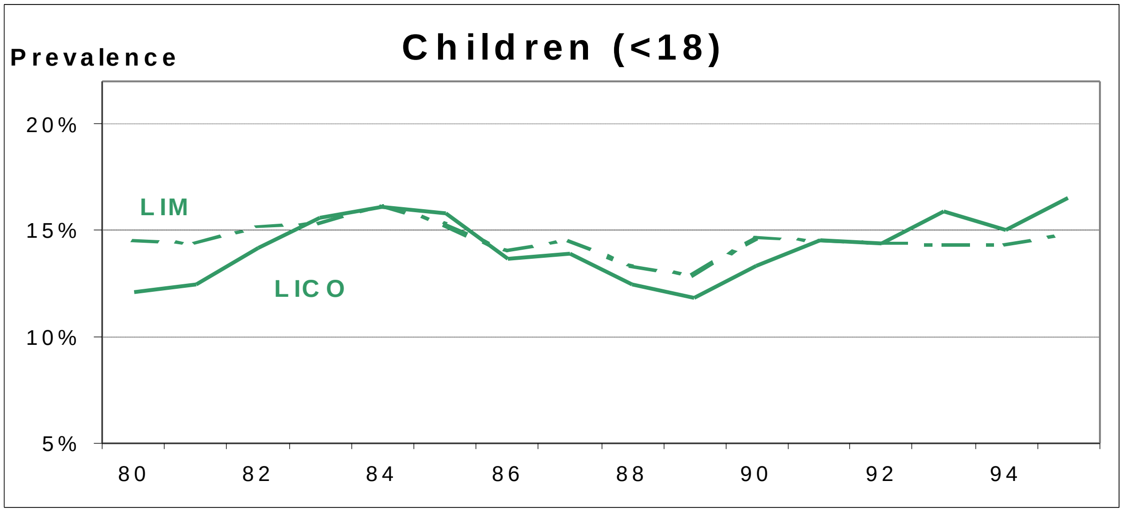
The trends vary sharply by age. The low income rate for seniors has declined from over 20% in 1980 to under 10% in 1995. The LIM shows an even sharper decline that the LICO. In contrast, the rate for children has been rising since 1989.

Partly because of this increase, partly because of a government commitment to eliminate child poverty, the low income rates and the underlying methodology are receiving a great deal of public scrutiny. Virtually every release of low income results triggers public discussion on the LICO measure itself. In particular, there is concern that the LICO is “too high”.

Chart 5: Prevalence of low income based on after-tax income LICOs and LIMs, 1980-1995







Some have called for a public debate on how poverty should be measured. At the same time, some users and commentators express anxiety over the fact that discussions on poverty are often focusing on the measurement issues, which detracts attention from the underlying phenomenon of income inadequacy.

Statistics Canada continues to correct media commentary that portrays low income estimates as a measure of poverty. The Agency often repeats that they are not intended as such. Statistics Canada's position was outlined in a note sent to, and printed by, many of the daily newspapers last autumn. This note indicated that while they are not intended as poverty lines, LICOs have served a useful purpose by highlighting important trends, such as the fact that lone parent families have replaced seniors as the group with the highest low income rates. The Agency has maintained that without an internationally accepted definition of poverty or a politically-sanctioned interpretation of what "poor" means in a Canadian context, Statistics Canada cannot measure poverty. However, should an official definition of poverty be established, the Agency would endeavour to produce estimates.

6. MARKET BASKET MEASURE (MBM)

Against this backdrop, a new initiative has been launched by the provincial and territorial governments, in collaboration with the federal Human Resources Development Canada (HRDC). The Ministers of Social Services are seeking to define a measure of poverty that:

- is credible with respect to the severity of poverty
- is related to changes in costs of consumption
- is easy to understand (though not necessarily easy to calculate) and
- is sensitive to geographical differences.

The methodology for such a measure will be reviewed by the provincial and territorial governments and, should an agreement be reached, estimates of poverty would be produced.

7. NEW SURVEYS AND SHIFTING PERCEPTIONS

In June 1997, Statistics Canada released the first longitudinal results from the Survey of Labour and Income Dynamics. Tables such as the ones below indicate substantial shifts in income. For example, the survey shows that 4.4 million people fell below the low income cutoff in 1993 or 1994. Of that total, just over half were below the line in both years. In short, there is a significant turnover in the low income population from one year to the next. Among those who dropped below the low income cutoff in 1994, the median decline in family income was $8,200. Those who rose above the threshold in 1994 had a median increase of $6,200. Thus, the income shifts associated with crossing the low income line are substantial.

The SLID study also showed that family composition changes occurred for 41% of all persons who moved out of low income and 28% of those who moved into low income. In contrast, only 15% of those who remained above the line in both years had a change in their family's composition. For those who remained below the line in both years, the proportion is even lower, at 11%. Also associated with crossing the line were geographical mobility and substantial shifts in the number of hours worked by all family members.

The issue here is that the advent of new information on income dynamics may begin to alter our views on poverty and possibly also on its measurement. The potential exists for identifying the "persistently poor" and addressing the needs of experiencing a short-term spell of income inadequacy.

In Canada, there is also a household survey on assets and debts under development. This survey is being tested in 1998 and will go into production in 1999. Called the Survey of Financial Security, it will update information last collected in 1984. Current plans call for a regular updating of our asset and debt information in the future, every three or four years.

There is much speculation regarding the extent to which the asset and debt profile of the Canadian population has shifted over the past 15 years. This availability of current asset and debt information may also have an impact on how we view poverty and its measurement.

Table 3: Persons shifting into and out of low income between 1993 and 1994*

	1994			
1993	Below LICO		Above LICO	
	‘000	%	‘000	%
Below LICO	2,286	8.5	846	3.2
Above LICO	1,238	4.6	22,492	83.7

* Based on all persons, classified according to their family’s income level

Table 4: Persons classified by the income quintile their family fell into in 1993 and 1994 (percentage distribution)

	Income quintile in 1994				
Income quintile in 1993	1st (bottom)	2nd	3rd	4th	5th (top)
1st (bottom)	14.2	4.3	0.9	0.4	0.2
2nd	3.4	11.3	4.0	0.9	0.3
3rd	1.0	3.0	11.6	3.9	0.5
4th	0.6	1.1	2.9	12.0	3.4
5th (top)	0.5	0.5	0.7	2.7	15.6