Occasional Paper No. 154

Family Changes and Income Inequality under Globalization The Case of Hong Kong

Stephen W. K. Chiu



February 2005



HONG KONG INSTITUTE OF ASIA-PACIFIC STUDIES THE CHINESE UNIVERSITY OF HONG KONG SHATIN, NEW TERRITORIES HONG KONG

# Family Changes and Income Inequality under Globalization

## The Case of Hong Kong

Stephen W. K. Chiu

Hong Kong Institute of Asia-Pacific Studies The Chinese University of Hong Kong Shatin, New Territories Hong Kong

#### About the Author

Stephen W. K. Chiu is Professor in the Department of Sociology, The Chinese University of Hong Kong.

#### Acknowledgements

I would like to acknowledge the financial support from the Department of Sociology, The Chinese University of Hong Kong through a departmental small grant on this project. I am also grateful to the Census and Statistics Department for generating statistical tables and for the kind assistance of its staff in analysing the public use data files. David Levin made very useful comments on an earlier draft and the able research assistance of Winnie Chan was also indispensable.

Opinions expressed in the publications of the Hong Kong Institute of Asia-Pacific Studies are the authors'. They do not necessarily reflect those of the Institute.

© Stephen W. K. Chiu 2005

ISBN 962-441-154-9

All rights reserved. No part of this book may be reproduced in any form without written permission from the author.

# Family Changes and Income Inequality under Globalization

### The Case of Hong Kong

### Introduction

There is a long line of argument in the literature on urban development that traces growing social polarization as indicated by widening occupational and income disparities to the globalization of the urban economy. More specifically, the development of an urban locale into a global city has been regarded as a critical determinant of social polarization. In this paper, I examine the case of Hong Kong, which has attained the status of a major global city via the development of producer and financial services with the acceleration of globalization. According to the global city thesis, this process should give rise to the deepening of occupational and income polarization. While showing this thesis to be largely supported by the Hong Kong experience, I also tackle the issue of whether there is a socio-demographic dimension to the process of income polarization. I argue that income disparity at the individual level is also reflected at the household level through different patterns of family formation and household employment strategies. Very briefly, through a quantitative analysis, this paper argues that the impact of an increase in labour force participation by wives and a higher correlation between the incomes of husbands and wives over the 1990s has also accentuated income polarization at the household level

To substantiate this argument, I use micro-data from the Population Censuses to analyse the trends in household income inequality between 1991 and 2001, a period of heightened globalization in Hong Kong. By decomposing aggregate income inequality, isolating the contribution of husbands and wives, and examining different types of households, this paper puts into sharp relief the ways in which local and socio-demographic factors mediate the economic processes of globalization.

## The Global City-Polarization Thesis

The link between the rise of the global cities and social polarization has been pushed to the forefront of social analysis since the 1980s. Sassen (1991, 2001) and Friedmann (1986; also Friedmann and Wolff 1982), in particular, have forcefully articulated a thesis of the distinctiveness of the "global city" or "world city" in seeking to capture the impact of the structural transformation of the world economy towards accelerated globalization and increasing integration. As Sassen (2000:4) has pointed out, today's global cities are:

(1) command points in the organization of the world economy; (2) key locations and marketplaces for the leading industries of the current period — finance and specialized services for firms; and
 (3) major sites of production for these industries, including the production of innovations in these industries.

One of the most interesting and controversial aspects of the global city thesis concerns the impact of the emergence of global cities as "postindustrial production sites" and the ascendance of financial and producer services in these cities on the broader social and economic structure of major cities: the so-called polarization thesis.

It is argued that these sectoral and occupational trends have exacerbated social inequality. Sassen (1998:137) summarized the polarization thesis succinctly in terms of three dynamic processes:

(1) the growing inequality in the profit-making capacities of different economic sectors and in the earning capacities of different types of workers; (2) the polarization tendencies embedded in the organization of service industries and the casualization of the employment relation; and (3) the production of urban marginality, particularly as a result of new structural processes of

economic growth rather than those producing marginality through abandonment.

Friedmann and Wolff (1982:322) also contended that "the primary social fact about world city formation is the polarisation of its social class divisions." For both Wolff and Sassen, the expansion of employment tends to cluster at the top and bottom ends of the occupational/income distribution at the expense of the middle. De-industrialization and the expansion of service industries have contributed to this phenomenon. Manufacturing jobs paying middlelevel incomes have been replaced by service jobs that are either relatively highly paid or relatively poorly paid. Sassen (1998) also pointed to the casualization of employment relations at the lower end of the labour market and in the labour-intensive service industries in the form of rising job insecurity and part-time jobs. Job requirements in the new service economy have also became polarized in terms of educational and skill credentials. Jobs at the bottom are often filled by marginal workers, primarily documented or undocumented migrants from countries with a lower level of development. Sassen (1998) has called this "dualization" in the organization of service industries. The image of a "dual city" with a squeezed middle has therefore been invoked to describe the social structure of the global city (Marcuse 1989:699). Occupational polarization in the sense of the expansion of both the top and bottom levels of the occupational hierarchy is therefore the driver of income inequality. Both of these changes are supposed to be observable at the level of the individual.

### The Household as the Missing Link?

The polarization thesis has been subjected to criticisms from several angles. First, there are doubts as to whether the polarizing trend in the occupational and income structures is really observable in global cities (Hamnett 1994, 1996; Baum 1999). Second, the concept of polarization as used in the literature on global cities has also been found to be imprecise (Hamnett 1994). Finally, White (1998) also criticized the "economic reductionist and ethnocentric" tendencies in

the global city-polarization thesis and its neglect of the differences among various allegedly global cities.

The attempts to dispute or empirically verify the polarization thesis, however, have mostly made use of data on individual income distribution (see Hamnet 1994; Baum 1999). While individual fortunes are important, the household is perhaps an even more important unit of analysis when we consider the impact of globalization on the locality. As Baum (1999:1109) has reminded us: "The household is important in a discussion of social polarisation due to its position as a consumption unit and the association between this role and the allocation of scarce resources in the wider social structure." To be fair, the current literature on global cities does occasionally bring up the subject of the household or use household-level data, but there has been no sustained discussion on the relationship between the household and the impact of globalization. Bruegel (1996:1436), for example, has argued that: "This linkage of household structure changes to economic restructuring arising from globalisation might be taken further. A decreasing reliance of households on male earnings looks to be a more general attribute of global city economies." I think this line of investigation is critical for an understanding of rising inequality in global cities.

Pahl (1988:251) attempted to draw a direct link between the household level of analysis and social polarization by pointing to the unequal distribution of employment opportunities among household members across different households:

My argument, therefore, is that certain households are becoming increasingly more fortunate, whereas others are becoming increasingly more deprived. Thus, to put it positively, some but certainly not all — households with 'core' workers and other members of the household also in employment (either full or parttime) are able to achieve and to maintain high household incomes and substantial affluence, despite the individually weak labour market position of some of their members.

Dale and Bamford (1989) tested Pahl's hypothesis by analysing household income from the British General Household Survey. Their

findings highlight the effect of the number of household income earners on overall income distribution. The effect of the increase in the proportion of households without any income earners appeared, however, to be more significant in the British case than the effect of the increase in multi-earner households over the period 1973 to 1982. The trend of the increasing participation of married women in employment continued until 1979, but was interrupted by the recession when the proportion of households in which both husband and wife were unemployed rose.

Pahl's focus, as well as that of Dale and Bamford, is more concerned with those in the lower stratum of the social structure since the aim is to uncover new cleavages within the working class. In contrast, Bruegel (1996:1438) emphasized the role of women at the other end of the occupational hierarchy in a global city:

The relatively favourable structure of employment for women reflects the concentration of administrative and professional functions, which may foster a culture more open to the entry of women into higher-level jobs. Certainly, the sex composition of professional and managerial jobs is more favourable to women in London than elsewhere in Britain.

Her main point, however, concerns how this process contributed to the rising divorce rate and concentration of single-parenthood in London. As a result, as she (1996:1438) concluded, "the institutionalised gendering of jobs within the labour market and the gendered relations of individuals to households are a largely unexplored aspect of urban restructuring." This paper therefore hopes to rectify this imbalance and examine the broader links between changes in households and the process of social polarization.

There has been a great deal of discussion in the field of economics on the effects of the income of wives on household inequality, but there is no consensus over the direction of the influence. The American experience has been analysed most thoroughly. Danziger (1980), one of the first to examine the impact of the increase in working wives on household income inequality, disputed the emergent view that the income of wives has become more disequalizing since the late 1960s; if anything, it has reduced aggregate inequality by a small margin. The reason, he believed, was the fact that there was a negative relationship between the incomes of husbands and wives. Most follow-up studies have reported that American working wives have had an equalizing impact on household income distribution (Cancian, Danziger and Gottschalk 1993). Karoly and Burtless (1995), however, found that since 1979 the gains that women have made in earnings have increased income inequality among households because these gains have increasingly been concentrated in families with high incomes. Cancian and Reed (1999), using a different method of decomposition, have disputed this conclusion and upheld the conventional observation of the equalizing impact of the income of wives.

The experiences of other countries have been more mixed. Winegarden (1987) used cross-national data and found a U-shaped relationship between rising labour force participation rates for women and income inequality. Starting from low levels of participation, a rise in rates of activity substantially increased income inequality. This disequalizing effect, however, began to reverse once the female labour participation rate reached 40%. Gronau (1982) looked at the Israeli experience and concurred that the earnings of married women had an egalitarian effect on family income inequality. The results have been contradictory for the United Kingdom. Harkness, Machin and Waldfogel (1996) confirmed the equalizing impact of wives' earnings on overall income inequality among households. However, Jenkins (1995), using a different methodology, showed that the income of wives had increased income inequality over a roughly similar period. Jäntti (1997) examined the experiences of five countries in the 1980s and reported that the income of spouses increased inequality in countries where their factor share had increased, namely, Sweden, the United Kingdom, Canada and the United States.

Following in the footsteps of these attempts, this study examines whether changes in household composition *and* the gendered occupational structure contributed to widening income inequality in Hong Kong over the period of accelerated globalization. My hypothesis is that the income of wives increased income inequality among households during the 1990s because more wives were working, they were earning more than before, and a wife's income also became more correlated with that of her husband. In particular, I incorporate the concepts and methods from the economic literature on household income inequality to analyse the impact of changes in the participation of women in the labour force. Because the economic literature has been mired by conflicting conclusions and divergent methodologies, the methodology and sampling criteria I use will be explained in greater detail in the next section. I also employ a range of different analytical strategies to enhance the robustness of the findings.

### **Data and Method**

The basic source of information used in this study is drawn from the 1991 and 2001 Population Censuses conducted by the Census and Statistics Department. Two questionnaires were used in the Census. The short form was used to enumerate the basic characteristics (e.g., age and sex) of about six-sevenths of all households. The long form was used to enumerate a broad range of socio-economic characteristics of the household members of the remaining one-seventh of all households. Most of the variables we need have been drawn from the long form. Apart from published findings, in most of our analyses we have had to use the public use data files that have the full sample of the long form. Sample weights have been assigned by the Census and Statistics Department to extrapolate the results to the entire population.

The Census measures income as the earnings derived from main employment and other employment and other cash income for individual members of the household. Household income is defined as the income from all employments and other cash income of all members of the household. Since the unit of analysis is the household, the incomes of unrelated members of the household are also added to the total. In general, this is not a problem as a household is defined in the Census as an income-sharing unit: "Persons who make common provisions for essentials for living inside a unit of quarters are regarded as members of the same household" (Census and Statistics Department 2002:59). The Census definition, however, also includes live-in domestic helpers as members of the household. Since their income is basically a transfer payment from the household to the helper, their income must be excluded from the total household income in order to avoid double-counting.<sup>1</sup> My study also distinguishes between different sources of income within the household. I divide total household income into three main sources: the income of the male head, the income of the female head and other income. In a typical household with a married couple, the husband's income will be considered that of the male head, the wife's income will count as that of female head, and their child's income will be included as other income. A single man living alone will have no income from the female head. In most of our analyses, we exclude the small number of households that have no income.

Income measures in 1991 are updated to constant 2001 prices using the same inflator used by the Census and Statistics Department. Because large families require more resources than smaller ones to maintain the same level of consumption, adjustments will also be made to total household income according to household size. Yet, since larger households could also economize by sharing resources, I assign weights to additional persons in the household rather than calculate an average per capita income. Since previous analyses are divided on the best way to adjust income for household size, I use several alternative methods. Following Karoly and Burtless (1995:382), I use the following equation to calculate adjusted household income (I) in the following analysis:

$$Y_A = \frac{Y_U}{H^{\theta}}, \qquad (1)$$

where  $Y_A$  is the adjusted household income,  $Y_U$  is the unadjusted household income, H is the number of persons in household and  $\theta$ is the adjustment for household size. They have assumed that  $\theta$  is equal to 0.5, which they observe is close to the adjustment for family size implicit in the official poverty thresholds. By this method, a quadrupling of family size yields a doubling of the income needed to sustain an equivalent level of consumption. I also use the OECDequivalence scale to adjust for household sizes for income series (II) (Fritzell 1993).<sup>2</sup> Finally, for adjusted household income (III) I also use a scale implicit of the average level of support from the Comprehensive Social Security Assistance (CSSA) Scheme, which is the local means-tested welfare system for unemployed or families with special needs. I use the average monthly payment under the CSSA Scheme in the financial year 2000-01 classified by the number of eligible family members.<sup>3</sup>

Income data from the public use data files of the Census have been top-coded to protect the privacy of the respondents. The topcoding threshold was HK\$99,998 in 1991 and HK\$150,000 in 2001. Since income grew substantially over the period and the percentage of observations affected by the top-coding tended to increase over the two panels as a result, measured inequality appears to fall. To make top-coding consistent across the two panels, I follow Karoly and Burtless (1995) and top-code male earnings at the 97th percentile and top-code female earnings at the 98th percentile in both sets of data.

Two strategies of decomposition will be used in the study. The first is the decomposition of the squared coefficient of variation, which is simply the variance divided by the squared arithmetic mean of income:

$$CV^2 = \frac{\sigma^2}{\mu^2} \,. \tag{2}$$

The squared coefficient of variation has some convenient properties that allow us to decompose it into the relative influence of each source of income. A common decomposition equation can be written as:

$$CV^{2} = S_{h}^{2}CV_{h}^{2} + S_{w}^{2}CV_{w}^{2} + S_{o}^{2}CV_{o}^{2} + 2\rho_{hw}S_{h}S_{w} + 2\rho_{ho}S_{h}S_{o} + 2\rho_{wo}S_{w}S_{o}, \qquad (3)$$

where  $S_k = \mu_k / (\mu_h + \mu_w + \mu_o)$ ,  $CV_k^2$  is the squared coefficient of variation for income component k,  $\rho_{kj}$  is the correlation between a pair of income components,  $S_k$  is the share of total family income from component k, and  $\mu_k$  is the mean of income from component k. In the analysis of the relative contribution of different sources to household income, the subscript h denotes husbands' income; w denotes wives' income and o denotes residual income from other sources. From this formula and following Jäntti (1997) we can then derive the absolute contribution of each source of income, as follows:

$$CV^{2} = \sum_{k} \frac{Cov(y_{k}, y)}{\mu^{2}} = \sum_{k} \rho_{k} CV_{k} CV \frac{\mu_{k}}{\mu} = \sum_{k} \rho_{k} \frac{\sigma_{k}}{\mu_{k}} \frac{\sigma}{\mu} \frac{\mu_{k}}{\mu}.$$
 (4)

The relative contributions of each source to overall income inequality can then be calculated by dividing each k component by the  $CV^2$  of income, as follows:

$$\frac{\rho_k C V_k C V \frac{\mu_k}{\mu}}{C V^2}.$$
(5)

The contribution of each component of income to the total change in inequality can then be further obtained by first calculating the change in inequality over  $t_1$  (1991) and  $t_2$  (2001), as follows:

$$\frac{CV_{t2}^2 - CV_{t1}^2}{CV_{t1}^2} \times 100\%.$$
(6)

This can then be decomposed into a sum of k components and the change in the contribution of each component can be expressed as:

%Δ(
$$CV^2$$
) =  $\sum_k \frac{S_{k,t2} - S_{k,t1}}{S_{k,t1}} \times \frac{S_{t1}}{CV_{t1}^2} \times 100\%$ , (7)

where  $S_{k,t}$  is the absolute contribution of the *k*th source in  $CV^2$  at time *t*.

All of the above decompositions concern households with married couples. Cancian and Reed (1999:181) have suggested another decomposition analysis that includes other types of households such as those with a single head and no married couples:<sup>4</sup>

$$CV^{2} = \frac{N_{A}}{N} \frac{\mu_{A}^{2}}{\mu^{2}} CV_{A}^{2} + \frac{N_{B}}{N} \frac{\mu_{B}^{2}}{\mu^{2}} CV_{B}^{2} + \frac{N_{A}N_{B}}{N^{2}} \frac{(\mu_{A} - \mu_{B})^{2}}{\mu^{2}},$$
(8)

where  $N_k$  is the population in the *k*th group and *N* is the population of all households. The subscript *A* denotes single-headed household and *B* denotes household with a couple. Through this analysis we can then examine the contribution of married women's earnings to total income inequality. This expression is more suitable than equation 4 for assessing the impact of changes in sources of income among all households. If we apply equation 4 to single-person or single-headed households, either the income of husbands or wives will be set to zero; but this is very different conceptually from a household in which the husband or wife does not have any income.

In another set of analyses, I divide all households into different groups according to the number of income earners in the household in order to assess the influence of having more than one income earner on aggregate income inequality. Following Jäntti (1997:427) and Jenkins (1995), the decomposition analysis of the effects of population structure starts from the mean logarithmic deviation (MLD):

$$MLD = \log \mu - \overline{\log y}, \tag{9}$$

where  $\log y$  is the mean of the natural logarithm of household income, and  $\log \mu$  is the logarithm of the mean of household income. This measure has been used to assess the relative importance to the trend in aggregate inequality of the share of population sub-groups, their relative incomes, and within-group inequality. The MLD can be decomposed by sub-groups into:

$$MLD = \sum_{k} \left( \frac{N_{k}}{N} MLD_{k} + \frac{N_{k}}{N} \log \frac{\mu}{\mu_{k}} \right)$$
$$= \sum_{k} \left( \frac{N_{k}}{N} MLD_{k} - \frac{N_{k}}{N} \log \frac{\mu_{k}}{\mu} \right), \qquad (10)$$

where  $N_k$  is the population of the *k*th sub-group. The change in MLD over two years can then be approximately decomposed into

the following (Mookherjee and Shorrocks 1982:896-97; Jenkins 1995:38; Jäntti 1997:428):

$$\Delta MLD = MLD_2 - MLD_1$$

$$= \sum_k \left( \frac{N_{k2}}{N_2} MLD_{k2} - \frac{N_{k1}}{N_1} MLD_{k1} + \frac{N_{k1}}{N_1} \log \frac{\mu_{k1}}{\mu_1} - \frac{N_{k2}}{N_2} \log \frac{\mu_{k2}}{\mu_2} \right)$$

$$\approx \sum_k \frac{\overline{N_k}}{N} \Delta MLD_k + \sum_k \overline{MLD_k} \Delta \frac{N_k}{N} - \sum_k \overline{(\log \frac{\mu_k}{\mu})} \Delta \frac{N_k}{N} - \sum_k \frac{\overline{N_k}}{N} \Delta \log \mu_k$$
[term A] [term B] [term C] [term D], (11)

where  $\frac{\overline{N_k}}{N} = \frac{1}{2} \left( \frac{N_{k1}}{N_1} + \frac{N_{k2}}{N_2} \right)$  and  $\overline{MLD_k}$ ,  $\overline{\left( \log \frac{\mu_k}{\mu} \right)}$  are similarly defined. In this formula, term A is the contribution of the within-group change in inequality, terms B and C denote the changes in population share by sub-groups, and term D represents the effect of the changing relative incomes of different sub-groups.

### Development into a Global City, Occupational Restructuring, and Income Inequality in Hong Kong

Hong Kong's development as a global city through the rapid growth of financial and other producer services in the last two decades is an ofttold story and we need not repeat it here (but see Chiu, Ho and Lui 1997; Meyer 2000; Tao and Wong 2002; Chiu and Lui 2004a). A summary of the relative standing of Hong Kong in the global hierarchy is offered by Beaverstock, Taylor and Smith (1999) in their work (as part of the Globalization and World Cities (GaWC) Research Group and Network at Loughborough University) on constructing an inventory and ranking of global cities. Their methodology specifically measures the extent to which different cities constitute "postindustrial production sites" on the basis of their corporate services and finance and degree of embeddedness in a global network. They measure "world-cityness" by the level of a city's development in four major global service capacities: accountancy, advertising, banking/finance and law. In particular, they record the presence of major global firms in the above four sectors and come up with a three-tiered classification: prime global service centres, major global service centres and minor global service centres. In legal services and banking services, Hong Kong is identified as a prime global service centre, whereas in accountancy and advertising, Hong Kong is regarded as major global service centre. A summary of these measures, therefore, ranks the "world-cityness" of a roster of 122 cities on a scale of 1 (lowest) to 12 (highest). Hong Kong scored 10, along with five others (Chicago, Frankfurt, Los Angeles, Milan and Singapore); while London, Paris, New York and Tokyo scored 12. Together these ten cities are classified as *Alpha world cities*.

Thus, there seems little doubt that Hong Kong's recent development undoubtedly merits its inclusion among a small number of global cities standing at the apex of the contemporary global economy. More important for our purpose here are the changing patterns of employment. The transformation of Hong Kong into the headquarters of operations for a dispersed global network of production activities was precipitated by the relocation of manufacturing production to low-cost countries. Based on Census data, the share of manufacturing in total employment dropped from 28.2% in 1991 to 12.3% in 2001. This sector lost close to half of its working population over the decade, from 768,121 to 400,952. Commerce (wholesale, retail and import/ export trades, restaurants and hotels) emerged as the largest employer, with more than a quarter of the total employment in 2001, followed by community, social and personal services, and business services (financing, insurance, real estate and business services). The largest relative gain in employment, however, was recorded in business services. The working population in this sector increased by 82.1%, followed by community, social and personal services (53.9%) and commerce (39.5%) (Census and Statistics Department 2002:136).

The process of de-industrialization mainly affected manual workers. Similar stories have been reported in many former industrial cities in advanced Western countries (Gordon and Harloe 1991: 386). In Hong Kong, the number of skilled and semi-skilled manual workers in the "craft and related" and "plant and machine operators and assemblers" categories has plummeted (Table 1). Between 1991 and 2001, the number of craft and related workers dropped by 19.3%, while that of "plant and machine operators and assemblers" fell by 34.8%. This occurred in spite of the 19.8% growth in the total labour force from 2.72 million to 3.25 million during the same period. In fact, as the number of production workers (craftsmen and operatives) shrank sharply, the ranks of managerial and professional employees expanded substantially. This signified the importance of professional workers in the provision of specialized producer services in financing, real estate and insurance. A major increase was also seen in the numbers of clerks and service and sales workers. In fact, the magnitude of the growth in these two occupations in terms of absolute numbers far exceeded that of the above managerial and professional occupations.

The most dramatic growth of a specific occupational group, however, was registered in the elementary occupations. They grew by only 26.1% over the period 1991 to 2001 because they were already the largest occupational group in 1991. But in absolute terms, the occupation actually gained 131,561 persons, the largest among the nine main occupational groups by far. As we shall see later, this drastic expansion was largely a result of the inflow of foreign domestic helpers. This, of course, highlights the importance of migrant workers in the emergent global cities (see also Chiu and Lui 2004b). In any case, the rapid expansion in service and sales workers and in the various unskilled elementary occupations lends credence to the polarization thesis. Social polarization in Hong Kong is clearly observable through changes in the occupational structure.

Further support for the social polarization thesis can be drawn from the relative income differentials of the various occupational groups. The gap between the two groups with the lowest median monthly incomes (elementary and services and sales) and the highest income group, the professionals, had also widened (See Table 2). The median income of the professionals was 4.29 times that of the elementary occupations in 1991. In 2001 it was 5.66 times. The comparable ratio for professionals versus service and sales workers

91 and 2001	
199	
Occupation,	
by (	•
Population	
Working	•
[able 1	

Occupation	1991		2001		1991	-2001
	Number	%	Number	%	% change	Percentage point change
Managers and administrators	249247	9.2	349637	10.7	40.3	1.5
Professionals	99331	3.7	179825	5.5	81.0	1.8
Associate professionals	279909	10.3	498671	15.3	78.2	5.0
Clerks	431651	15.9	529992	16.3	22.8	0.4
Service workers and shop sales workers	359319	13.2	488961	15.0	36.1	1.8
Craft and related workers	397992	14.7	321000	6.6	-19.3	-4.8
Plant and machine operators and assemblers	365826	13.5	238666	7.3	-34.8	-6.2
Elementary occupations	503832	18.5	635393	19.5	26.1	1.0
Skilled agricultural and fishery workers; and occupations not classifiable	27996	1.0	10561	0.3	-62.3	-0.7
Total	2715103	100.0	3252706	100.0	19.8	

Source: Census and Statistics Department (2002:135).

able 2	Median Monthly Income from Main Employment of Working Population by Occupation, 1991, 1996
	and 2001

Occupation	Median monthly	income from main en	ployment (HK\$)	% change
l	1991	1996	2001	1991-2001
Managers and administrators	12000	20000	26000	116.7
Professionals	15000	24000	30000	100.0
Associate professionals	8000	14000	16000	100.0
Clerks	5000	0006	10000	100.0
Service workers and shop sales workers	5000	8500	9110	82.2
Craft and related workers	5000	8500	10000	100.0
Plant and machine operators and assemblers	4500	8500	10000	122.2
Elementary occupations	3500	5500	5300	51.4
Overall	5170	9500	10000	93.4

Source: Census and Statistics Department (2002:138).

was 3 and 3.29 in 1991 and 2001, respectively. As noted above, the elementary occupations and service and sales workers were also the groups that had experienced the largest growth in numbers during the 1990s. Although there were signs of professionalization (as the higher income groups had the largest relative growth), the overall direction of the changes in occupational structures in Hong Kong appears to fit the social polarization thesis.

### **Income Polarization**

According to proponents of the global city thesis, occupational polarization is but one facet of the constellation of social changes unleashed by the development of a global city. The other dimension, income polarization, is also important. Widening income differentials are a direct result of the differential earning abilities and rates of growth of firms in different sectors in a global city. Occupational polarization in the sense of an expansion both at the top and bottom of the occupational hierarchy is therefore the driver behind income inequality. While disputes often arise over the presence and extent of occupational polarization, widening income inequality or polarization has often been reported in the literature on polarization in the global cities (Hamnett 1994, 1996; Baum 1997; Wessel 2000). The only exception perhaps is Baum's (1999) study of Singapore, in which he finds a convergence in income distribution towards middle- and high-income groups.<sup>5</sup>

According to the findings of the 1991 and 2001 Censuses, there was a surge in income inequality among households in Hong Kong. Measured at constant prices, the median monthly household income increased in all but the lowest income decile group, as shown in Table 3. The lowest decile group experienced a 3.5% reduction in monthly income, whereas the highest income group had close to a 30% increase. The higher the income decile, the larger the increase in income over the 1990s. As a result, we can see that the ratios of the median incomes in the lower deciles to the highest decile had all declined since 1991. The ratio of the lowest decile to the highest was about 0.05 in 1991, but dropped to 0.037 in 2001, a decline of 26%. That of the second decile declined from 0.108 to 0.084 of the highest decile, while even the third

Median Monthly Domestic Household Income by Decile Groups of Domestic Households, 1991, 1996 and 2001 Table 3

Decile group	Median me consta	onthly domest nt (February 2	ic household (001) prices (	income at (HK\$)	Income	ratio of the N- 10th deci	th decile grou lle group	p to the
	1991	1996	2001	% change 1991-2001	1991	1996	2001	% change 1991-2001
1st (lowest)	3084	3042	2977	-3.47	0.050	0.043	0.037	-26.00
2nd	6631	7499	6750	1.79	0.108	0.106	0.084	-22.22
3rd	9252	10140	10000	8.08	0.150	0.143	0.125	-16.67
4th	11102	12675	13000	17.10	0.180	0.179	0.163	-9.44
Sth	13775	16123	16500	19.78	0.223	0.227	0.206	-7.62
6th	16499	19773	20500	24.25	0.267	0.279	0.256	-4.12
7th	20046	23829	25705	28.23	0.325	0.336	0.321	-1.23
8th	25633	30175	32560	27.02	0.416	0.425	0.407	-2.16
9th	34641	40560	44650	28.89	0.562	0.571	0.558	-0.71
10th (highest)	61680	70980	80000	29.70	1.000	1.000	1.000	
Gini coefficient	0.476	0.518	0.525	10.29				

Source: Census and Statistics Department (2002:82-83).

18 Family Changes and Income Inequality under Globalization

decile group saw its median income shrink, from 0.15 of the highest income group to 0.125. Thus, in the relative sense, income polarization grew because of the much higher rate of income growth at the top, but absolute polarization also occurred because of the decline in the income of the lowest income group. The Gini coefficient, a summary measure of the extent of income inequality also rose precipitously, from 0.476 in 1991 to 0.525 in 2001, or by more than 10% (Census and Statistics Department 2002:82).

### Decomposition Analysis by Income Source among Couple Households

To what extent was rising household inequality a result of the differentiation between work-rich and work-poor households observed by Pahl? On this point, I follow the literature on the contribution of women's employment and income on overall income inequality and decompose the squared coefficient of variation by source of income. In this set of analyses I will first restrict the discussion to households with a married couple rather than include all households because there is a conceptual difference between a household where the wife does not work and one without a wife (see Cancian and Reed 1999). In Table 4, I present the means and contribution of the husbands' income, wives' income and other incomes to the total household income as well as their changes over the decade. Overall, the contribution of the income of wives to total household income increased significantly over 1991 and 2001, from 18.9% to 24.3%. The average of the wives' income also rose sharply, from HK\$4,217.3 to \$6,903.7, or by 63.7%. The overall squared coefficient of variation increased by 10.5% from 0.608 to 0.672, indicating a substantial increase in observed inequality among the households. The pattern is consistent even after various adjustments by household size.

Beneath the aggregate picture, however, is the considerable differentiation across the income hierarchy, as shown in Table 5. The average contribution of wives' income to total household income rose across all the quintiles, and proportionately it was the largest at both the top and the bottom quintiles. Yet in the bottom quintile, wives had

		, E					5	5
Income sources		Share (%)			Mean (HK\$)		ົ	V <sup>2</sup>
	1991	2001	% change	1991	2001	% change	1991	2001
Unadjusted household income								
Husband	58.08	55.66	-4.17	12985.51	15820.73	21.83		
Wife	18.86	24.29	28.79	4217.34	6903.73	63.70		
Others	23.06	20.05	-13.05	5156.35	5700.35	10.55		
Couple households	100.00	100.00		22359.20	28424.81		0.608	0.672
Adjusted household income (I)*								
Husband	59.65	56.49	-5.30	6844.61	8522.36	24.51		
Wife	20.03	25.30	26.31	2298.06	3817.14	66.10		
Others	20.32	18.21	-10.38	2331.29	2747.15	17.84		
Couple households	100.00	100.00		11473.96	15086.65		0.649	0.712
Adjusted household income (II)*								
Husband	61.62	57.92	-6.00	5124.37	6570.14	28.21		
Wife	20.97	26.34	25.61	1744.22	2987.16	71.26		
Others	17.41	15.74	-9.59	1448.04	1785.51	23.31		
Couple households	100.00	100.00		8316.64	11342.81		0.767	0.832
Adjusted household income (III)*								
Husband	60.18	56.83	-5.57	5290.40	6638.25	25.48		
Wife	20.51	25.76	25.60	1802.76	3009.19	66.92		
Others	19.31	17.41	-9.84	1697.90	2033.97	19.79		
Couple households	100.00	100.00		8791.06	11681.41		0.714	0.775
Note: * Please see the text for an Sources: Census and Statistics Depa	explanation artment, Publ	of the methc ic Use Popul	ds of adjusting ation Census D	income by hou ataset, 1991 an	sehold size. d 2001.			

20 Fa

a very low level of average income and, consequently, the percentage share of wives' income in total income was rather low. Even in 2001, it accounted for only 20.5%. In the highest quintile, however, wives' income increased markedly over the decade and was close to 27% of the total income by the end of the decade. This shows the divergent weight of wives' income between households of different levels of income.

To further test this observation, I follow equation 4 and decompose the overall squared coefficient of variation into the contribution of mutually exclusive components (see Table 6). The correlation between wives' income and husbands' income increased from 0.333 in 1991 to 0.382 in 2001, while the mean and the share of wives' income both rose over the decade. The inequality of husbands' income increased rapidly, while that of wives decreased because of the entrance of women into the labour force and, thus, there were fewer wives with no income. More significantly, both the absolute and relative contribution of wives' income to total income inequality jumped by 38.7% and 25.5%, respectively. Wives' income also accounted for a substantial percentage (9.2% versus 9% for husband's income) of the aggregate rise in income inequality. Again, adjustments by household size did little to affect the direction of the effects. We can conclude that wives' income is a significant factor behind the widening gap in income between rich and poor households.

Next, I follow the method employed by Cancian and Reed (1999) and assess the impact of changes in income sources among households by comparing the observed distribution with a reference distribution. The reference distribution is constructed by assuming three counterfactual conditions in order to evaluate whether the income of wives had a disequalizing effect on the income distribution:

Counterfactual 1: All wives did not work and had zero income.

- Counterfactual 2: The mean and dispersion of wives' income had not changed over the period in question.
- Counterfactual 3: The mean, dispersion and correlation of wives' income with other sources had not changed over the period in question.

Sources of Household Income by Income Quintiles, 1991 and 2001 **Table 5** 

Income	Income			Inadjusted h	nousehold in	come			Adj	usted hous	ehold inco	me (I)	
quintile	sources		Share (9	(0)	N	lean (HK\$)			Share (%		M	ean (HK\$	
		1991	2001	% change	1991	2001	% change	1991	2001	% change	1991	2001	% change
lst	Husband	75.64	67.30	-11.03	5104.35	4735.77	-7.22	75.03	66.92	-10.81	2733.81	2660.85	-2.67
(lowest)	Wife	12.42	20.45	64.65	838.00	1438.66	71.68	13.44	21.59	60.64	489.73	858.47	75.29
	Others	11.94	12.25	2.60	805.81	862.13	66.9	11.53	11.49	-0.35	420.02	456.82	8.76
	Couple households	100.00	100.00		6748.17	7036.56	l	100.00	100.00		3643.57	3976.14	
2nd	Husband	71.60	62.31	-12.97	8518.11	8904.07	4.53	71.35	62.15	-12.89	4393.09	4710.61	7.23
	Wife	14.26	18.52	29.87	1696.83	2646.65	55.98	14.98	19.21	28.24	922.41	1455.88	57.83
	Others	14.14	19.17	35.57	1681.63	2739.69	62.92	13.67	18.65	36.43	841.76	1413.44	67.91
	Couple households	100.00	100.00		11896.57	14290.41	I	100.00	100.00		6157.26	7579.93	
3rd	Husband	59.97	54.54	-9.05	10257.04	11828.33	15.32	60.71	55.09	-9.26	5393.70	6354.83	17.82
	Wife	18.61	21.78	17.03	3183.58	4722.48	48.34	19.68	22.73	15.50	1748.51	2622.33	49.98
	Others	21.42	23.68	10.55	3663.82	5134.70	40.15	19.61	22.18	13.11	1742.06	2558.73	46.88
	Couple households	100.00	100.00		17104.44	21685.51		100.00	100.00		8884.27	11535.89	

22 Family Changes and Income Inequality under Globalization

4th	Husband	49.79	48.66	-2.27	12651.18	15921.18	25.85	51.73	49.87	-3.60	6706.29	8620.31	28.54
	Wife	19.36	24.00	23.97	4917.58	7852.06	59.67	20.93	25.34	21.07	2713.28	4379.83	61.42
	Others	30.85	27.34	-11.38	7838.22	8943.64	14.10	27.34	24.79	-9.33	3545.16	4284.83	20.86
	Couple households	100.00	100.00		25406.97	32716.88		100.00	100.00		12964.73	7284.97	
5th	Husband	56.08	56.80	1.28	28396.32	37714.09	32.81	58.31	57.81	-0.86	14995.85 2	20265.10	35.14
(highest)	Wife	20.64	26.90	30.33	10450.48	17858.70	70.89	21.84	27.87	27.61	5616.25	9769.13	73.94
	Others	23.29	16.30	-30.01	11792.00	10821.47	-8.23	19.86	14.33	-27.84	5107.32	5021.87	-1.67
	Couple households	100.00	100.00		50638.80	66394.25		100.00	100.00		25719.42 3	\$5056.10	

and 2001.
1991
Dataset,
Census
opulation
Use Pc
Public
Department,
Statistics
Census and
Sources:

Decompositions of Change in Income Inequality by Income Source, 1991 and 2001 Table 6

Income sources	Correlati wife's i	ion with ncome		CV <sup>2</sup>			Absolution	ion		Relativ	/e tion	Contribution of income source to change
	1991	2001	1991	2001	% change	1991	2001	% change	1991	2001	% change	(%)
Unadjusted househ	old incor	ne										
Husband	0.333	0.382	0.908	1.081	19.087	0.322	0.377	16.966	0.530	0.561	5.810	8.990
Wife			2.753	2.321	-15.712	0.144	0.199	38.732	0.237	0.297	25.501	9.166
Others	-0.085	-0.132	3.676	3.851	4.739	0.142	0.096	-32.611	0.233	0.142	-39.038	-7.613
Couple households	0.589	0.658	0.608	0.672	10.541	0.608	0.672	10.543	1.000	1.000		10.543
Adjusted household	d income	(E)										
Husband	0.376	0.416	1.017	1.153	13.295	0.390	0.422	8.176	0.601	0.593	-1.318	4.915
Wife			2.955	2.442	-17.342	0.181	0.234	29.490	0.278	0.329	18.125	8.209
Others	-0.121	-0.159	3.481	3.699	6.255	0.078	0.055	-29.073	0.120	0.078	-35.298	-3.503
Couple households	0.652	0.702	0.649	0.712	9.624	0.649	0.712	9.621	1.000	1.000		9.621
Adjusted household	d income	(II)										
Husband	0.415	0.453	1.177	1.303	10.688	0.500	0.520	3.891	0.652	0.625	-4.288	2.539

Wife			3.262	2.658	-18.518	0.232	0.290	25.465	0.302	0.349	15.587	7.690
Others	-0.139	-0.174	3.413	3.652	7.004	0.035	0.022	-36.962	0.046	0.026	-41.925	-1.683
Couple households	0.698	0.742	0.767	0.832	8.544	0.767	0.832	8.546	1.000	1.000		8.546
Adjusted household	d income	(III)										
Husband	0.402	0.441	1.110	1.235	11.210	0.444	0.468	5.424	0.622	0.604	-2.903	3.372
Wife			3.132	2.582	-17.570	0.208	0.264	27.095	0.291	0.340	17.056	7.881
Others	-0.127	-0.163	3.483	3.692	5.983	0.063	0.043	-30.559	0.088	0.056	-36.044	-2.676
Couple households	0.677	0.724	0.714	0.775	8.580	0.714	0.775	8.577	1.000	1.000		8.577

1 and 2001.
199
Dataset,
Census
pulation
: Use Po
, Public
spartment
Ď
Statistic
Census and
Sources:

As we can see from equation 4, the impact of changes in wives' income on overall household income inequality is basically a function of the mean and dispersion of wives' income and its correlation with other sources. Counterfactual 2 tests what would have happened if the distribution of wives' income had not changed. Counterfactual 3, on the other hand, checks whether the changes in the correlation between the incomes of husbands and wives, along with the changing distribution of wives' income, had an impact on household inequality. Table 7 summarizes the result of applying these counterfactuals, while allowing the other sources of income to change as they actually did. Under counterfactual 1, wives' income was set to zero in both 1991 and 2001. The result was a considerable drop in estimated inequality in both years. Over the decade, the squared coefficients of variations also declined slightly by 2%, reversing the actual increase of 10.5%. That means that had all wives not worked throughout, overall inequality might have dropped, but only marginally. Under counterfactual 2, both the means and dispersions of wives' income were set to the baseline period of 1991. As a result, the squared coefficient of variation fell by more than 17.88% in 2001 and over the decade observed inequality declined significantly by 17.9%. With counterfactual 3, the 2001 squared coefficient of variation declined even further, with inequality estimated to have dwindled by 18.88% since 1991. Again, while the magnitude of the changes under different counterfactuals differs from one method of adjusting by household size to another, the direction of the effects of the counterfactual conditions has been consistent. We can safely conclude that wives' income was disequalizing and contributed to the rise in income inequality among couple households in Hong Kong. If the income of wives had not changed over the past decade, overall inequality would have dropped sizably rather than increased.

### Decomposition Analysis by Sub-groups among All Households

What about the impact of wives' income on the income inequality of all households, including those without married couples? As Cancian

able 7	The Impact of Changes in Wives' Income under Different Counterfactuals for Couple Households,
	1991 and 2001

			2(	001			1991-2001	% change	n
Actual Cour factu	unter-	Actual	Counter- factual 1	Counter- factual 2	Counter- factual 3	Actual	Counter- factual 1	Counter- factual 2	Counter- factual 3
Unadjusted household income 0.608 0.4	.418	0.672	0.410	0.499	0.493	10.55	-2.00	-17.88	-18.88
Adjusted household income (I) 0.649 0.4	.406	0.712	0.400	0.566	0.559	9.62	-1.56	-12.80	-13.85
Adjusted household income (II) 0.767 0.4	.447	0.832	0.436	0.714	0.704	8.55	-2.57	-6.84	-8.19
Adjusted household income (III) 0.714 0.4	.430	0.775	0.419	0.637	0.628	8.57	-2.73	-10.86	-12.03

and Reed (1999:174) observed, the impact of wives' income in couple households may be very different from that among all households: "Wives' earnings may equalize the distribution of earnings among married-couple families while increasing the divergence between the incomes of married couples and other families." Two alternative strategies will be used in this study. First, equation 8 will be used to decompose the squared coefficient of variation while dividing the population of married couples and households without a married couple, whether single-person or single-headed. Second, we will follow equation 11 and decompose aggregate income inequality as measured by the MLD into within-group and between-group components and assess the influence of different factors on the changes over time. I shall divide the households by the number of income earners in the households as well as by different types of households.

Table 8 presents the results of the first decomposition. Again, irrespective of the method of adjusting for household size (or no adjustment), wives' income led to an increase in overall income inequality even when other households were included. The income inequality for both single-headed and couple households increased between 1991 and 2001, but the relative contribution to total inequality by wives' income in couple households also climbed significantly over the same period. For unadjusted income, the contribution of wives to overall income inequality increased from 17.5% to 22.5%, or by 28.5%, over the two time points. The magnitude of the relative increase was smaller for adjusted income, but the contribution of wives' income to total inequality still increased by between 16% and 18%, depending on the method of adjustment. Applying the counterfactuals 2 and 3 in the above section to this result, we can further demonstrate the effects of the changes in wives' income on the aggregate income distribution. Again, when we assume in both cases that wives' income did not change over the decade, the estimated total inequality diminishes markedly and the result is a decline in inequality rather than an increase, as was observed during this period.

Compared with the squared coefficient of variation, MLD is more suitable for use in a decomposition analysis to find out the relative influence of different sub-groups in the population. I performed two

able 8	The Impact of Changes in Wives' Income under Different Counterfactuals for All Househol	lds,
	1991 and 2001	

All households		Actuá	ıl CV <sup>2</sup>		Counter-		Change in	inequality	
	1991	2001			factual CV <sup>2</sup>		due to cł wives' i	nange in ncome	
	(1)	(2)	(2)-(1)	% change	(4)	(2)-(4)	% change	(4)-(1)	% change
Counterfactual 2									
Unadjusted household income	0.645	0.772	0.128	19.81	0.613	0.159	26.02	-0.032	-4.93
Adjusted household income (I)	0.665	0.787	0.122	18.38	0.699	0.088	12.53	0.035	5.20
Adjusted household income (II)	0.808	0.927	0.119	14.75	0.890	0.038	4.22	0.082	10.10
Adjusted household income (III)	0.758	0.882	0.124	16.36	0.828	0.054	6.48	0.070	9.28
Counterfactual 3									
Unadjusted household income	0.645	0.772	0.128	19.81	0.608	0.164	27.07	-0.037	-5.71
Adjusted household income (I)	0.665	0.787	0.122	18.38	0.695	0.092	13.27	0.030	4.52
Adjusted household income (II)	0.808	0.927	0.119	14.75	0.883	0.044	4.93	0.076	9.35
Adjusted household income (III)	0.758	0.882	0.124	16.36	0.823	0.059	7.12	0.065	8.62

sets of analyses, namely decomposition by types of households and number of income earners. In addition to the number of income earners, I classified households into ten types, according to the earning capacity and needs of the household. Broadly following Dale and Bamford (1989), several principles were applied to the classification, that is, whether the households consist of single persons only, elderly persons (65 years old or above) or married couples. Among married couples, I distinguished between those with a working wife and those without one because of the obvious difference in earning capacity. Households with elderly persons also mean that the households will be structurally weaker in terms of earning capacity. Among this type of household, those with elderly persons only are most likely to have no income earners. In effect, we wanted to know whether the increase in inequality was a function of the increase in multi-earner households and an increase in the proportion of households with no earners, or work-rich and work-poor households.

First, I consider the partitions by types of households. Table 9 summarizes the descriptive statistics of different types of households. Reflecting the aging of the population, several types of households with an elderly person (types 1, 2, 5 and 6) increased significantly, at a much higher rate than the 28.9% increase in all households. For types 1, 2 and 5, however, average household income also dropped significantly and these opposite trends should have some impact on aggregate inequality. Single-person households (type 3) increased in both number and in average income, but more remarkable were households of working-age couples with an economically active wife (type 7). For type 7, both the number of households and average income rose by 48% and 41%, respectively.

The decompositions are summarized in Table 10 and we will focus on the adjusted income data in the following analysis. Aggregate inequality increased by 15% between 1991 and 2001. Between-group inequality is dominant, but between-group inequality also contributed to aggregate inequality. Two groups in 2001 accounted for much of the between-group inequality, namely, those with a single and elderly head without other adults, and those with working-age couples and working wives without other adults. Over the 1990s, changes in the

household mix did "worsen" income inequality, as evidenced by the size (34%) of Terms B and C. Again, two groups (types 1 and 7), dominated the two Terms. Changes in relative income between the different types of households also accounted for close to 60% of the total change in inequality. Together, these findings suggest that changes in aggregate inequality correlate significantly with the changing composition of households and their relative income. For simplicity's sake, I have included only one series of adjusted household income (I) in the table. The overall results are broadly in line with those of the unadjusted household income, although the results for individual types of households differ. For example, type 3 (single working-age person household) contributed negatively to overall inequality in terms of unadjusted household income, but the direction reversed for adjusted income.

Next, I turn to the decomposition by number of income earners. Unlike the previous analyses, I include households with no income in the sample because changes in the composition of household structure would certainly have a significant impact on the number of income earners, creating new divisions between households ranging from those that have multiple income earners to those having none at all. Table 11 shows the number and group mean income of households in 1991 and 2001 according to the number of income earners, including those with no income and, hence, no earners. Again to save space, I report only one series of adjusted household income (I), but the results are robust across different methods of adjustment for household size.

Table 12 shows the partition of the changes in aggregate inequality by number of earners according to equation (11). I focus on the estimation based on adjusted income here in order to control obvious differences due to household size. Between 1991 and 2001, aggregate inequality as measured by MLD showed a striking increase of 0.119 or by 37.3%. Terms B and C, reflecting the changes in the numbers in different types of households (in this case the number of earners in the household), accounted for over 52% of the total change. Within-group changes (Term A) and changes in the relative incomes of different groups (Term D) also contributed to the overall increase

All households		Me	an househo	ld income (	HK\$)	
	Unadjuste	d househo	old income	Adjusted l	nousehold	income (I)
	1991	2001	% change	1991	2001	% change
Single and elderly head w/o other adults	5963.9	4622.4	-22.49	5816.5	4552.4	-21.73
Single and elderly head w/ other adults	11665.9	9989.3	-14.37	7465.7	6481.9	-13.18
Single and working- age adult head w/o other adults	13011.7	18057.6	38.78	11963.9	16951.8	41.69
Single and working- age adult head w/ other adults	19847.3	24022.4	21.04	11579.9	14849.7	28.24
Both elderly couple w/o other adults	9122.9	7353.6	-19.39	6271.2	5051.2	-19.45
Both elderly couple w/ other adults	19176.5	22731.6	18.54	9554.9	11684.2	22.29
Working-age adult couple w/ EA wife but w/o other adults	25226.7	35980.0	42.63	14741.2	20766.9	40.88
Working-age adult couple w/ non-EA wife and w/o other adults	15983.6	20478.4	28.12	8555.0	11115.1	29.93
Working-age adult couple w/ EA wife and w/ other adults	28653.4	33958.1	18.51	13111.0	16161.7	23.27
Working-age adult couple w/ non-EA wife and w/ other adults	23309.7	27091.8	16.23	10588.6	13015.0	22.92
Overall	20807.9	25121.4	20.73	11627.2	14729.6	26.68

### Table 9Income Trends by Types of Household, 1991 and 2001

Note: EA = economically active.

Sources: Census and Statistics Department, Public Use Population Census Dataset, 1991 and 2001.

	Ν	Mean household	income (HK\$	5)	
Adjusted	household in	come (II)	Adjusted	household in	come (III)
1991	2001	% change	1991	2001	% change
5797.5	4566.4	-21.23	5772.0	4531.1	-21.50
5959.5	5282.0	-11.37	6231.3	5432.6	-12.82
11831.2	16851.9	42.44	11659.3	16624.9	42.59
11001.2	10001.9		11009.0	10021.9	.=.07
8705.7	11587.2	33.10	9316.6	12196.3	30.91
5253.0	4283.5	-18.46	5380.6	4330.5	-19.52
6348.7	7947.0	25.18	7147.4	8821.6	23.42
11854.3	16996.2	43.38	11868.8	16665.5	40.41
6602.9	8739.0	32.35	6629.5	8661.7	30.65
8422.7	10735.6	27.46	9562.1	11903.9	24.49
6677.1	8537.1	27.86	7703.6	9616.3	24.83
8921.8	11757.3	31.78	9327.1	12030.5	28.98

All households	No.	of househo	lds	Pr	oportion	. (%)
-	1991	2001	% change	1991	2001	% change
Single and elderly head w/o other adults	62921	97814	55.46	4.00	4.82	20.58
Single and elderly head w/ other adults	12583	18759	49.08	0.80	0.93	15.64
Single and working- age adult head w/o other adults	214197	282437	31.86	13.62	13.93	2.28
Single and working- age adult head w/ other adults	213626	248806	16.47	13.58	12.27	-9.66
Both elderly couple w/o other adults	22768	54400	138.93	1.45	2.68	85.33
Both elderly couple w/ other adults	29751	63296	112.75	1.89	3.12	65.02
Working-age adult couple w/ EA wife but w/o other adults	282394	418004	48.02	17.96	20.62	14.81
Working-age adult couple w/ non-EA wife and w/o other adults	300314	332951	10.87	19.10	16.42	-14.01
Working-age adult couple w/ EA wife and w/ other adults	203689	244019	19.80	12.95	12.04	-7.08
Working-age adult couple w/ non-EA wife and w/ other adults	230348	266971	15.90	14.65	13.17	-10.10
Overall	1572591	2027457	28.92	100.00	100.00	_

# Table 9Income Trends by Types of Household, 1991 and 2001<br/>(Continued)

in inequality, but their contributions are smaller. Again, we can see that households with no income earner contributed to the bulk of the changes in aggregate inequality, but households with two earners also added to the overall change.

## Why did Wives' Income and Changing Household Structure Contribute to Rising Income Inequality?

From the above decompositions, two socio-demographic trends could be observed to dominate the rise in aggregate income inequality: changes in wives' income and changes in the mix of types of households in the population. In this section, I will briefly review some of the factors behind both trends and explain why they led to widening income inequality among households over the last decade in Hong Kong. As noted in Table 9 above, the percentage of households with an economically active wife increased moderately from 30.9% of all households in 1991 to 32.7% in 2001. Among our sample of couple households, the percentage with a working wife increased from 45.5% to 48%, or by 5.6%. This is actually a larger increase than the change in overall labour force participation rate among all women from 49.5% in 1991 to 51.6% in 2001 (Census and Statistics Department 2002:129).

Not only did the proportion of married women staying in the labour force rise, their human capital also improved considerably. The proportion of women with tertiary education in the population increased from 9.4% in 1991 to 15.2% in 2001 (Census and Statistics Department 2002:98). For married women in our sample of married couples and excluding foreign domestic helpers, the percentage with a tertiary education was 5.9% and 6.3% in 1991 and 2001, respectively. Among working wives, however, the proportion of those with a tertiary education increased sharply from 9.4% to 16.9%. The proportion of wives with a tertiary education who were working also rose from 68.5% in 1991 to 71.1% in 2001. Because of the rising labour force participation rate and their higher level of human capital, the average

All households		1991	
-	Relative	share (%)	Overall
	Within-	Between-	MLD
	group	group	
Unadjusted household income			
Single and elderly head w/o other adults	36.57	63.43	0.698
Single and elderly head w/ other adults	59.04	40.96	0.777
Single and working-age adult head w/o other adults	44.54	55.46	0.345
Single and working-age adult head w/ other adults	96.75	3.25	0.233
Both elderly couple w/o other adults	47.55	52.45	0.712
Both elderly couple w/ other adults	88.05	11.95	0.311
Working-age adult couple w/ EA wife but w/o other adults	2630.90	-2530.90	0.241
Working-age adult couple w/ non-EA wife and w/o other adults	52.45	47.55	0.247
Working-age adult couple w/ EA wife and w/ other adults	-103.50	203.50	0.183
Working-age adult couple w/ non-EA wife and w/ other adults	384.89	-284.89	0.207
Overall	82.81	17.19	0.330
Adjusted household income (I)			
Single and elderly head w/o other adults	51.07	48.93	0.693
Single and elderly head w/ other adults	64.67	35.33	0.758
Single and working-age adult head w/o other adults	118.90	-18.90	0.361
Single and working-age adult head w/ other adults	112.98	-12.98	0.216
Both elderly couple w/o other adults	54.42	45.58	0.703
Both elderly couple w/ other adults	62.81	37.19	0.283
Working-age adult couple w/ EA wife but w/o other adults	-5576.13	5676.13	0.261
Working-age adult couple w/ non-EA wife and w/o other adults	48.53	51.47	0.262
Working-age adult couple w/ EA wife and w/ other adults	610.29	-510.29	0.178
Working-age adult couple w/ non-EA wife and w/ other adults	75.13	24.87	0.196
Overall	91.44	8.56	0.302

# Table 10Decomposition of Levels of Inequality by Types of<br/>Household, 1991 and 2001

Sources: Census and Statistics Department, Public Use Population Census Dataset, 1991 and 2001.

	2001				1991-2001		
Relative	share (%)	Overall		cha	ange in Ml	LD	
Within-	Between-	MLD	Term A	Term B	Term C	Term D	Overall
group	group						change
18.62	81.38	0.387	-0.014	0.004	0.014	0.009	0.013
40.61	59.39	0.631	-0.001	0.001	0.002	0.001	0.002
52.02	47.98	0.358	0.002	0.001	0.003	-0.014	-0.008
84.65	15.35	0.247	0.002	-0.003	-0.013	-0.001	-0.015
27.72	72.28	0.471	-0.005	0.007	0.017	0.003	0.022
74.51	25.49	0.292	0.000	0.004	0.012	0.000	0.015
-274.98	374.98	0.263	0.004	0.007	0.028	0.024	0.063
60.69	39.31	0.316	0.012	-0.008	-0.027	-0.009	-0.031
-167.55	267.55	0.189	0.001	-0.002	-0.010	0.008	-0.002
151 62	51 (2	0.222	0.002	0.002	0.015	0.002	0.012
131.03	-31.03	0.222	0.002	-0.003	-0.013	0.003	-0.013
75 76	24 24	0.376	0.002	0.009	0.011	0.024	0.046
15.10	21.21	0.570	0.002	0.007	0.011	0.024	0.040
24.75	75.25	0.386	-0.014	0.004	0.011	0.006	0.008
42.58	57.42	0.609	-0.001	0.001	0.001	0.001	0.002
154.73	-54.73	0.397	0.005	0.001	0.003	0.005	0.014
103.48	-3.48	0.241	0.003	-0.003	-0.013	0.001	-0.012
30.00	70.00	0.459	-0.005	0.007	0.016	0.003	0.021
53.66	46.34	0.268	0.000	0.003	0.013	-0.001	0.015
-395.88	495.88	0.274	0.002	0.007	0.028	0.024	0.061
52.94	47.06	0.317	0.010	-0.008	-0.028	-0.011	-0.037
204.07	-104.07	0.182	0.000	-0.002	-0.009	0.003	-0.007
(a a :	26.56	0.010	0.005	0.005	0.01-	0.005	0.016
63.24	36.76	0.213	0.002	-0.003	-0.015	-0.003	-0.018
82.74	17.26	0.349	0.003	0.009	0.007	0.028	0.047

and 200
1991
Earners,
Income
Number of
by ]
Trends
Income
Table 11

All households		Mean of	househol	ld income (	HK\$)		No. 6	of househo	lds	Proj	portion (	%)
	Unadji	usted house income	plot	Adjusted I	iousehold j (I)	income						
	1991	2001	% change	1991	2001	% change	1991	2001	% change	1991	2001	% change
No earner	2064.63	252.36	-87.78	1251.63	143.25	-88.56	4105	23220	465.65	0.26	1.13	334.88
1 earner	13344.02	16267.32	21.91	8962.76	11524.52	28.58	704307	853761	21.22	44.69	41.65	-6.80
2 earners	22604.56	29969.59	32.58	12910.05	17262.38	33.71	537897	788248	46.54	34.13	38.46	12.66
3 earners	26297.45	31452.08	19.60	12785.81	15756.19	23.23	200593	260602	29.92	12.73	12.71	-0.12
4 or more earners	35805.60	42138.74	17.69	15034.73	18636.38	23.96	128922	123839	-3.94	8.18	6.04	-26.15
Overall	19962.19	24849.19	24.48	11273.47	14569.93	29.24	1575824	2049670	30.07	100.00	100.00	
Sources: Census	and Statisti	cs Departm	ent, Publ	ic Use Popu	lation Cen	isus Data	set, 1991 a	nd 2001.				

991 and 2001	
ncome Earners, 1	
v Number of I	
uality b	
of Ineq	
f Levels	
mposition of	
Decor	
Table 12	

All households	Overal	1 MLD		195	91-2001 chan	ge in MLD	
	1991	2001	Term A	Term B	Term C	Term D	Overall change
Unadjusted household income							
No earner	5.798	5.178	-0.004	0.048	0.030	0.014	0.088
1 earner	0.354	0.410	0.024	-0.012	-0.033	-0.029	-0.049
2 earners	0.251	0.306	0.020	0.012	0.044	0.018	0.094
3 earners	0.153	0.169	0.002	0.000	0.000	0.007	0.008
4 or more earners	0.107	0.117	0.001	-0.002	-0.025	0.009	-0.018
Overall	0.348	0.470	0.043	0.046	0.016	0.018	0.123
Adjusted household income (I)							
No earner	5.416	4.638	-0.005	0.044	0.030	0.015	0.083
1 earner	0.364	0.428	0.027	-0.012	-0.031	-0.022	-0.038
2 earners	0.266	0.309	0.016	0.012	0.044	0.018	0.089
3 earners	0.159	0.168	0.001	0.000	0.000	0.003	0.004
4 or more earners	0.105	0.115	0.001	-0.002	-0.022	0.005	-0.019
Overall	0.319	0.438	0.040	0.042	0.020	0.017	0.119

39

income of all wives increased from HK\$4,217.3 to \$6,903.7 over the ten years. Their average share of total household income also climbed from 18.9% to 24.3%. Therefore, the increase in the mean and share of wives' income pushed up aggregate income inequality among all households with married couples.

Another factor leading to a higher weight for wives' income in overall inequality is the stronger correlation between the incomes of husbands and wives. Not only have the incomes of wives increased, it is also likely that they would marry men with equal or higher incomes. As expressed in equation (3), the contribution of wives' income to overall household inequality also depends on the correlation between the incomes of wives and husbands in addition to their average income and share of the husband's income. The correlation between the incomes of husbands and wives rose from 0.333 in 1991 to 0.382 in 2001.

Why did the correlation between the incomes of husbands and wives increase? Homogamy, or the tendency for people of similar social background to marry each other is the root cause. Educational homogamy, or the tendency for men and women of similar educational background to marry each other, is one of the manifestations of the trend towards homogamy. While the tendency for people with similar characteristics to be "attracted" to each other is by no means a new phenomenon, the actual possibility of finding someone similar to oneself is also determined by supply-side factors in the marriage market. Prior to the 1990s, educational opportunities were not so widespread and the tertiary education system in particular was minuscule. In the early 1980s, less than 3% of young people in the 17-20 age group could enter university.<sup>6</sup> As the opportunities to receive a higher education are always more limited for women than for men, and more so in Chinese societies, the marriage market always had a "chronic shortage" of women with a higher education relative to men before the 1990s. As a result, women tended to marry "upward" and even if they worked after marriage, their incomes were likely to be a lot lower than their husbands' because of their inferior human capital.

There was a major expansion in tertiary education from the

late 1980s with the formation of new universities, including some converted from former polytechnics. By the late 1990s, degreeconferring programmes admitted more than 17% of the young people from the relevant age groups. Among the younger cohorts (25-34 years old) in 2001, the proportion of women with some tertiary education was 28.7%, close to 30.5% for men (Census and Statistics Department 2002:99). Hence, in the marriage market, women are likely to find more men with a similar educational background. If they themselves already had a tertiary education, the likelihood of finding a spouse with even higher qualifications would be relatively slim. Thus, there has been a steady trend towards greater educational homogamy over the last decade. In Table 13, we summarize the rates of educational homogamy by birth cohort in 2001, measuring the level of education at five-year intervals.<sup>7</sup> It is clear that a higher proportion of women married men of a similar educational level, as younger cohorts had a higher rate of homogamy. If anything, the trend for women to marry down is also evident

Regardless of whether women are marrying men of a similar or higher educational background, this trend is likely to contribute to a higher labour force participation rate and higher income for households with highly educated or higher income husbands. The relationship between husbands' income, arranged into quintiles, and wives' labour force participation rate is shown in Table 14. There is a clear pattern of married women with richer husbands being more likely to be in employment in both years. Also noticeable is the major increase in the participation rate for women in the highest husband-income quintile. In 1991, 50.3% of women were working in the highest husband-income quintile. In 2001, the corresponding figure was 57.4%. Among the lowest income group the labour force participation rate for women dropped precipitously, from 34.5% in 1991 to 32.5% in 2001. This clearly indicates that homogamy is the major cause of a higher correlation in the incomes of husbands and wives, because husbands with a higher level of education tended to have highly educated wives, and their wives also tended to be employed.

All of these trends led to a higher proportion of households

Birth cohort of husband	Education of husbands and wives			
	H>W	Same	W>H	N
1982-1986	11.71	60.36	27.93	111
1977-1981	14.74	55.43	29.83	4465
1972-1976	14.08	63.60	22.32	37830
1967-1971	19.51	60.79	19.70	104108
1962-1966	23.72	55.61	20.67	189244
1957-1961	28.29	50.34	21.37	246752
1952-1956	30.90	48.97	20.12	206974
1947-1951	34.46	48.36	17.19	177955
1942-1946	38.40	46.70	14.90	106058
1937-1941	37.59	48.14	14.27	100895
1936 or earlier	38.53	50.33	11.14	214954
Overall	30.79	51.32	17.89	1389346

Table 13The Relationship between the Education of Husbands<br/>and Wives by Birth Cohorts, 2001

Sources: Census and Statistics Department, Public Use Population Census Dataset, 1991 and 2001.

	,				
Husbands' income quintiles	Wives' participation rate within quintile group				
	1991	2001	% change		
1st (lowest)	34.47	32.54	-5.61		
2nd	47.36	44.50	-6.04		
3rd	43.75	49.85	13.95		
4th	46.11	53.44	15.90		
5th (highest)	50.28	57.41	14.17		
Overall	44.40	47.55	7.10		

Table 14	Wives' Labour Force Participation Rate by Husbands'
	Income Quintiles, 1991 and 2001

Note: Households with married couples and non-zero income.

Sources: Census and Statistics Department, Public Use Population Census Dataset, 1991 and 2001.

with a married couple *and* a working wife. But these are not the only changes in the structure of household compositions that affected overall income inequality. As observed earlier, apart from households with two income earners or economically active wives, the other types of household that contribute to income inequality are those with no income earner, or with elderly heads. The trend towards an aging population is unmistakable. In 1991, 8.7% of Hong Kong's population was 65 years of age or older. In 2001, 11.1% of the population had already reached the age of 65 (Census and Statistics Department 2002:36). In addition, many more elderly people are living alone or with another elderly person. In 1991, 86,508 households were elderlyonly households with no members under the age of 65. By 2001, their numbers had swelled to 136,298 or by 57.6%. Although most elderly persons still live with family members who are under 65 years of age, the aging of the population still led to an increase in the proportion of elderly-only households from 23.6% in 1991 to 25.5% in 2001 (Census and Statistics Department 2002:76).

Changes in patterns of labour force participation across age groups are also responsible for the rise in low-income households with elderly heads. In 1991, 14.1% of those aged 65 and above were still in the labour force. By 2001, the labour force participation rate of this age group had halved to 7.2%. The trend was even more dramatic for women, with the participation rate for elderly women plummeting from 7.5% to 2.6% over the same period (Census and Statistics Department 2002:130). This is probably a result of both demographic and economic processes. With the aging of the population, the 65-yearold group should be older in 2001 than in 1991; hence, it is normal for them to be out of gainful employment. The economic downturn since the Asian Financial Crisis in 1997, however, probably also contributed to the lower employment rate for senior citizens, as they are most likely to be squeezed out of work when job opportunities become scarcer. Therefore, the combined result of these processes gave rise to more households with elderly heads and no income from employment. Therefore, relative to households with dual or multiple income earners, the income gap for households with elderly persons and no income earners widened considerably.

Due to limitations of space, I can only offer here preliminary evidence that directly supports the correlation between sociodemographic changes and the development of a global city. From the Censuses, we learned that the working population was redistributed from the manufacturing to the tertiary sector, and that this contributed to a higher individual level of income inequality. The same is happening for women. The percentage of women working in financing, insurance, real estate and business services rose from 11.2% in 1991 to 14.9% in 2001, while those in community, social and personal services jumped from 26.7% to 37% (Census and Statistics Department 2002:136). Census and Statistics Department's unpublished statistics provided further disaggregation of the individual level of income distribution. The statistics show that these two sectors together accounted for 65.7% in the highest income decile in 2001. Certainly, most of the highest-income individuals were men, but close to 40% of population in the highest income decile were women working in these two sectors. The earnings of women also increased much more in the financing, insurance, real estate and business services sector than in other sectors. Between 1991 and 2001, median earnings for women in this sector grew by 40.5%, much higher than the 35.8% overall growth in median female earnings. This suggests that as more women were drawn into the tertiary sector, their presence among high-income earners also increased, as predicted by the global city thesis. As a result, a faster growth in the income of women in the service industries spurred by globalization should contribute to the improvement of the earning capacity of households with highly educated wives.

### Conclusion

The trend towards income polarization at the individual level following Hong Kong's development into global city is, as documented elsewhere, unmistakable (see e.g., Chiu and Lui 2004b). Even in the analyses presented here, we noted that the income of husbands had also become more unequal over the past decade and that this also contributed to the aggregate inequality that was observed. What I have sought to add to the well-established literature on the subject is to show, by using the Hong Kong experience, that the impact of globalization on the livelihood of the local community is definitely mediated by socio-demographic mechanisms. If we accept that living standards are a function of the pooling and consumption of resources at the level of the household, inequality among households, not simply individuals, has to be considered. When analysing householdlevel inequality, we need to know not just the income distribution for individuals within the household, but also changes in household compositions and the division of labour among members of the household. If people of similar levels of income form households, the result will be disequalizing. If wives with richer husbands tend to work and earn higher levels of income, and if the converse is true for households with husbands of a lower income-earning capacity, aggregate income inequality will certainly be aggravated. With an aging population and the tendency for elderly people to live alone (or with another elderly person), income inequality is also likely to widen. It is hoped that the analyses presented in this paper have contributed towards a better understanding of the intricate links between these socio-demographic mechanisms and the forces of globalization.

Our findings resonate with the literature on global cities in pointing out that while the forces of globalization might be inherently disequalizing, everywhere they are meshed with a myriad set of local factors that could lead to divergent outcomes in different global cities. In this respect, the current literature highlights the impact of policy and institutional factors such as the welfare regime and immigration policy. I completely agree that these factors are important and that further investigation of the Hong Kong case should definitely incorporate their effects. For example, the influx of foreign domestic helpers might contribute to the "releasing" of married middle-class women from domestic chores and into the labour market, while suppressing the wages of local women working in personal or domestic services. The limited nature of welfare provisions and the low income tax rate also played a minimal role in redistributing income from high-income to low-income households. Limitations of space do not permit a detailed discussion in the present analysis of how these variables interact with

processes of globalization. My objective in seeking to contribute to this literature was more modest. It was to draw attention to the importance of households in discussions of social polarization and to shed light on how socio-demographic changes at the household level mediate the impact of globalization and the consequent restructuring of the urban labour market.

## Notes

- 1. We select only domestic households for analysis and exclude the small number of non-domestic households (e.g., homes for the aged, infirmaries and student dormitories). Our analyses also exclude a small number of households without any adults (defined as those who are at least 15 years old).
- This scale entails the use of a factor of 1.0 for one-person households, 0.7 for each other adult and 0.5 for each child (under the age of 18) in the household (Fritzell 1993:48-49).
- 3. The average CSSA payment in 2000-01 was HK\$3,854, \$6,282, \$8,588, \$10,199, \$11,946 and \$14,637, respectively, for families with 1 to 6 and more members. See Census and Statistics Department (2003:FB16).
- 4. Our decomposition equation differs slightly from Cancian and Reed's, especially in the third term. Detailed mathematic proof of our derivation could be obtained by request from the author.
- 5. Baum's article, however, does not specify whether the analysis was based on income measured in current prices or constant prices.
- 6. See http://www.ugc.edu.hk/english/statistics/Chart.pdf.
- 7. The number of intervals for educational level will certainly affect the rate of homogamy. The broader the groups (and the smaller the number), the higher the rate will be. Our five-year intervals classification reflects the major divisions in the local education system.

## References

Baum, Scott. 1997. "Sydney, Australia: A Global City? Testing the Social Polarisation Thesis." *Urban Studies* 34(11):1881-901.

- Baum, Scott. 1999. "Social Transformations in the Global City: Singapore." *Urban Studies* 36(7):1095-117.
- Beaverstock, J.V., P.J. Taylor and R.G. Smith. 1999. "A Roster of World Cities." *Cities* 16(6):445-58.
- Bruegel, Irene. 1996. "Gendering the Polarisation Debate: A Comment on Hamnett's 'Social Polarisation, Economic Restructuring and Welfare State Regimes'." *Urban Studies* 33(8):1431-39.
- Cancian, Maria and Deborah Reed. 1999. "The Impact of Wives' Earnings on Income Inequality: Issues and Estimates." *Demography* 36(2):173-84.
- Cancian, Maria, Sheldon Danziger and Peter Gottschalk. 1993. "Working Wives and Family Income Inequality among Married Couples." Pp. 195-221 in Sheldon Danziger and Peter Gottschalk (eds) *Uneven Tides: Rising Inequality in America*. New York: Russell Sage.
- Census and Statistics Department. 2002. 2001 Population Census: Main Report — Volume I. Hong Kong: Printing Department.
- Census and Statistics Department. 2003. "Statistics on Comprehensive Social Security Assistance Scheme, 1993-2002." Pp. FB1-FB16 in *Hong Kong Monthly Digest of Statistics: April 2003.* Hong Kong: Printing Department.
- Chiu, Stephen W.K. and Tai-lok Lui. 1995. "Hong Kong: Unorganized Industrialism." Pp. 85-112 in Gordon L. Clark and Won Bae Kim (eds) *Asian NIEs and the Global Economy*. Baltimore: Johns Hopkins University Press.
- Chiu, Stephen W.K. and Tai-lok Lui. 2004a. "Global City, Dual City? Globalization and Social Polarization in Hong Kong since the 1990s." Hong Kong: Occasional Paper No. 144, Hong Kong Institute of Asia-Pacific Studies, The Chinese University of Hong Kong.
- Chiu, Stephen W.K. and Tai-lok Lui. 2004b. "Testing the Global City-Social Polarisation Thesis: Hong Kong since the 1990s." *Urban Studies* 41(10):1863-88.
- Chiu, Stephen W.K., K.C. Ho and Tai-lok Lui. 1997. *City-states in the Global Economy*. Boulder: Westview Press.
- Dale, Angela and Claire Bamford. 1989. "Social Polarization in Britain 1973-82: Evidence from the General Household Survey: A

Comment on Pahl's Hypothesis." *International Journal of Urban and Regional Research* 13:481-500.

- Danziger, Sheldon. 1980. "Do Working Wives Increase Family Income Inequality?" *Journal of Human Resources* 15(3):444-51.
- Friedmann, John. 1986. "The World City Hypothesis." *Development and Change* 17:69-84.
- Friedmann, John and Goetz Wolff. 1982. "World City Formation." International Journal of Urban and Regional Research 6:309-44.
- Fritzell, Johan. 1993. "Income Inequality Trends in the 1980s: A Fivecountry Comparison." *Acta Sociologica* 36(1):47-62.
- Gordon, Ian and Michael Harloe. 1991. "A Dual to New York? London in the 1980s." Pp. 377-96 in John Hull Mollenkopf and Manuel Castells (eds) *Dual City: Restructuring New York*. New York: Russell Sage Foundation.
- Gronau, Reuben. 1982. "Inequality of Family Income: Do Wives' Earnings Matter?" *Population and Development Review* 8(supplement):119-36.
- Hamnett, Chris. 1994. "Social Polarisation in Global Cities: Theory and Evidence." *Urban Studies* 31(3):401-24.
- Hamnett, Chris. 1996. "Social Polarisation, Economic Restructuring and Welfare State Regimes." *Urban Studies* 33(8):1407-30.
- Harkness, Susan, Stephen Machin and Jane Waldfogel. 1996. "Women's Pay and Family Incomes in Britain, 1979-91." Pp. 158-80 in John Hills (ed) New Inequalities: The Changing Distribution of Income and Wealth in the United Kingdom. Cambridge: Cambridge University Press.
- Jäntti, Markus. 1997. "Inequality in Five Countries in the 1980s: The Role of Demographic Shifts, Markets and Government Policies." *Economica* 64:415-40.
- Jenkins, Stephen P. 1995. "Accounting for Inequality Trends: Decomposition Analyses for the UK, 1971-86." *Economica* 62:29-63.
- Karoly, Lynn A. and Gary Burtless. 1995. "Demographic Change, Rising Earnings Inequality, and the Distribution of Personal Well-being, 1959-1989." *Demography* 32(3):379-405.

- Marcuse, Peter. 1989. "'Dual City': A Muddy Metaphor for a Quartered City." *International Journal of Urban and Regional Research* 13(4):697-708.
- Meyer, David R. 2000. *Hong Kong as a Global Metropolis*. Cambridge: Cambridge University Press.
- Mookherjee, Dilip and Anthony Shorrocks. 1982. "A Decomposition Analysis of the Trend in UK Income Inequality." *The Economic Journal* 92:886-902.
- Pahl, R.E. 1988. "Some Remarks on Informal Work, Social Polarization and the Social Structure." *International Journal of Urban and Regional Research* 12:247-67.
- Sassen, Saskia. 1991. *The Global City: New York, London, Tokyo.* Princeton: Princeton University Press.
- Sassen, Saskia. 1998. *Globalization and Its Discontents*. New York: New Press.
- Sassen, Saskia. 2000. *Cities in a World Economy*. 2nd ed. Thousand Oaks: Pine Forge Press.
- Sassen, Saskia. 2001. *The Global City: New York, London, Tokyo.* 2nd ed. Princeton: Princeton University Press.
- Tao, Zhigang and Y.C. Richard Wong. 2002. "Hong Kong: From an Industrialised City to a Centre of Manufacturing-related Services." *Urban Studies* 39(12):2345-58.
- Wessel, Terje. 2000. "Social Polarisation and Socioeconomic Segregation in a Welfare State: The Case of Oslo." Urban Studies 37(11):1947-67.
- White, James W. 1998. "Old Wine, Cracked Bottle? Tokyo, Paris, and the Global City Hypothesis." *Urban Affairs Review* 33(4):451-77.
- Winegarden, C.R. 1987. "Women's Labour Force Participation and Distribution of Household Incomes: Evidence from Cross-national Data." *Economica* 54:223-36.

# Family Changes and Income Inequality under Globalization

### The Case of Hong Kong

#### Abstract

The development of an urban locale as a global city has been regarded in the literature on urban development as a critical determinant of growing social polarization. I re-examine this thesis by using the case of Hong Kong, which has attained the status of a major global city because of the development of producer and financial services that has resulted from the acceleration of globalization. While showing that the Hong Kong experience largely supports the polarization thesis as indicated by widening occupational and income polarization, I also introduce a socio-demographic dimension into the analysis. I argue that income disparity at the individual level is also reflected at the household level through different patterns of family formation and household employment strategies. To substantiate this argument, I use data from the Hong Kong Population Censuses to analyse trends in household income inequality between 1991 and 2001, a period of heightened globalization in Hong Kong. By decomposing aggregate income inequality and isolating the contribution of husbands and wives and different types of households, this paper puts into sharp relief the ways in which local and socio-demographic factors mediate the economic processes of globalization.

# 全球化在香港

### 家庭結構轉變與收入不均加劇

### 趙永佳

### (中文摘要)

按城市發展學的論述,從「城市」發展為「全球化城市」 的過程乃引發社會兩極化的關鍵。本文以香港的經驗驗證此論 述。在全球化的推動下,香港從一個工業城市轉型為一個以服 務業為主導的全球化城市。本文希望從社會及人口角度,進一 步探討全球化對個人收入以至家庭收入兩極化的負面影響,這 點從家庭結構及其成員的就業分工可見一斑。本文運用1991及 2001年的人口普查數據,闡述香港在這高速全球化的十年間家 庭收入兩極化的趨勢,並透過分析家庭類型、夫婦收入比例, 理解香港經濟全球化的本土和社會人口因素。

### HONG KONG INSTITUTE OF ASIA-PACIFIC STUDIES

The Hong Kong Institute of Asia-Pacific Studies was established in September 1990 to promote multidisciplinary social science research on social, political and economic development. Research emphasis is placed on the role of Hong Kong in the Asia-Pacific region and the reciprocal effects of the development of Hong Kong and the Asia-Pacific region.

Director: Yeung Yue-man, PhD(*Chic.*), Research Professor

Associate Director: Sung Yun-wing, PhD(*Minn.*), Professor, Department of Economics

HK\$20.00