Study on Knock-on Effect of Statutory Minimum Wage on Pay Hierarchies in the Retail and Restaurant Sectors

Study Report
Introduction

1. Statutory minimum wage (SMW) came into force on 1 May 2011. The initial SMW rate was set at the level of $28 per hour. During consultation conducted by the Provisional Minimum Wage Commission (PMWC), stakeholders from the business community indicated that instead of only raising the wages of low-paid employees to the SMW rate or even beyond, they might also need to raise the wages of employees earning above the SMW rate for maintaining staff morale and preserving wage differentials in the hierarchy. This knock-on effect would likely be particularly pronounced in sectors and firms with multi-layered grade structure and small pay differences between adjacent ranks. Large and medium restaurants and retail shops were examples frequently quoted by stakeholders.

2. Based on views expressed in various submissions from stakeholders, the PMWC recommended conducting tracking studies for low paying sectors with special reference to the retail and restaurant sectors to monitor the empirical magnitude of knock-on effects after SMW implementation, so that due consideration could be given in this regard in future reviews of the SMW rate. The Government has taken forward this recommendation and commissioned Policy 21 Limited to conduct a study through a retrospective survey to assess the impact of knock-on effect of SMW on pay hierarchies in the retail and restaurant sectors.

3. The objectives of this Study are as follows: (i) to review and summarise the relevant literature, researches and experience in other economies on the knock-on effect of SMW on pay hierarchies; (ii) to conduct a retrospective survey to examine the rank and pay structures, remuneration packages and fringe benefits, wage and its distribution, working hours, etc (collectively known as “organisational structures”) of the retail and restaurant sectors in Hong Kong and their empirical changes; (iii) to examine whether the changes were caused by the implementation of SMW; and (iv) to assess the impact of knock-on effect of SMW on pay hierarchies of enterprises in different sub-sectors and of different sizes in the retail and restaurant sectors.

Literature Review

4. Through conducting literature review, this Study collected information and gathered available knowledge on the knock-on effect induced by the implementation of minimum wage on pay hierarchies in other economies, and examined in detail academic studies, reports

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and information relevant to the Study, covering related studies conducted in the United States, the United Kingdom (UK) and other countries.

5. A number of prominent features were found in the methodologies adopted by related studies conducted in the economies mentioned above. First of all, an overwhelming majority of the studies were conducted based on longitudinal data over a fairly long period of time. Secondly, while a number of studies made use of population-based data, others used firm-based data. Furthermore, changes in the wage distribution observed from empirical studies were likely to be affected by other changes such as the impact of changes in demand for goods and services and inflation on the labour market and the economy as a whole. The methodology adopted for this Study is similar to that used in some researches, i.e. mainly examining the impact of SMW on firms in selected sectors. As the Study commenced after the implementation of SMW, a retrospective approach was adopted by inviting employers to provide the relevant information on their business practices (e.g. pay practices, etc) prior to the implementation of SMW, rather than conducting two separate statistical surveys before and after the implementation of SMW.

6. The research published in 2006 by the Low Pay Commission in the UK\(^2\) demonstrated that it was feasible to gather relevant information from employers on the impact of minimum wage and provided a good reference on this subject. An enterprise-based approach was adopted in this Study to achieve multiple objectives. First and foremost, this Study aimed to examine the “organisational structures” in selected sectors. Secondly, the Study investigated the changes to the “organisational structures” and whether SMW had induced knock-on effect on pay hierarchies, including those for enterprises of different sizes and sub-sectors in the selected sectors. To achieve these objectives, it was necessary to obtain detailed statistical data on wages and ranks of employees for different occupations among enterprises of different sizes and in different sub-sectors. A more sophisticated approach for data collection with more representative sample size was essential for this Study so as to conduct more detailed analysis. Besides, face-to-face interviews, rather than telephone interviews as adopted in some of the studies conducted in the UK, were adopted in this Study to gather more detailed information.

7. In our literature review, most researches showed that there would be some knock-on effect with varying degrees arising from the implementation of minimum wage. Some researches showed that minimum wage might compress wage distribution. For example, after the implementation of the National Minimum Wage (NMW) in the UK, the “well-paid”

employees did not request to maintain the original pay differential with the “less-paid” employees. On the contrary, the increase in the wages of “well-paid” employees with pay already above the minimum wage level was less than that of those “less-paid” employees with pay below the minimum wage level, showing that knock-on effect on pay rise induced by minimum wage was relatively mild. However, the overall economy and labour market conditions in Hong Kong are different from other economies. Moreover, whether differences exist in wage structure among different ranks depend on individual industries.

More importantly, when this Study commenced, SMW had just been introduced in Hong Kong for about half a year. As employers might take a longer time to respond to changes arising from SMW implementation (e.g. by changing production processes and re-arranging workforce), the impact of SMW (including knock-on effect) might not have fully emerged during the survey period. We have no predetermined stance on whether the findings of this Study will corroborate with those observed in other economies.

8. In the course of the design of this Study and the questionnaire survey, the Study team made reference to other sources of information, including the practices of the Census and Statistics Department (C&SD) in conducting related surveys, relevant views from the Minimum Wage Commission and related organisations (including employers’ associations, labour organisations, etc), as well as relevant local studies. The purpose was to ensure that the data obtained were professionally sound and appropriate.

Survey Methodology

9. The selected sectors covered in the statistical survey were the retail sector and the restaurant sector. Sub-sectors under the retail sector included supermarkets, convenience stores and other retail stores, while sub-sectors under the restaurant sector included Chinese restaurants, non-Chinese restaurants, fast food cafés and Hong Kong style tea cafés.

Enterprises sampled were classified by employment size into small enterprises (with 3 to 9 employees), medium enterprises (with 10 to 49 employees) and large enterprises (with 50 or more employees). This survey covered both full-time and part-time employees. The terms and definitions used in the survey (including the definition of “employee”) are set out in the Appendix.

10. The statistical survey adopted a retrospective survey methodology to collect data for two reference periods before and after the implementation of SMW, which were September 2010 and September 2011 respectively. As mentioned above, it was shown in the relevant researches of other economies that it is feasible to gather relevant information from employers on the impact of minimum wage. This statistical survey interviewed
representatives of the sampled enterprises, including personnel, accounting and administrative staff. A face-to-face interview approach was adopted to collect the required information and data with more details, including those of enterprises and employees during the two reference periods before and after the implementation of SMW (e.g. number of outlets and number of employees of the enterprise, working hours and wages of each target employee, etc).

11. In addition to the views contained in the Report of the PMWC, when designing the questionnaire, reference was made to the practices adopted by C&SD in their earnings and manpower surveys. The practices of C&SD are based on international practices and recommendations, relevant legal provisions on wages and fringe benefits, and international standard classifications of occupations and industries. Besides, researchers invited comments from related organisations (including employers’ associations, labour organisations, etc) on the information that should be covered and the practical feasibility of the design of the questionnaire. The Study team also briefed the Minimum Wage Commission on the research methodology, as well as the major content and design of the questionnaire with the draft, and the Minimum Wage Commission provided its comments. To ensure the feasibility of the questionnaire, a Pilot Survey was also conducted to test the questionnaire design. Experience and feedbacks gathered from the Pilot Survey were taken on board, and relevant parts of the questionnaire were refined accordingly.

12. The statistical survey collected both quantitative and qualitative information. The questionnaire was designed based on the principle of gathering objective data and it collected information on the enterprise itself and the target employees. At the same time, views of enterprises on the impact of SMW were also obtained in the questionnaire. To facilitate matching of occupations across different enterprises, the Study team classified occupations of the retail and restaurant sectors into six broad occupational groups with reference to the job description lists adopted in international and local statistical surveys. The six occupational groups were managers and professional staff, supervisors, clerical workers, service workers, technicians/operators and elementary workers.

13. The statistical survey adopted a disproportionate stratified sampling design. The sampling units at enterprise and branch levels were selected randomly by C&SD from the Central Register of Establishments (CRE). Factors taken into account in stratification included industry of the enterprises as well as their employment size and location of outlets. CRE is the most up-to-date, complete and authoritative sampling frame on business establishments available in Hong Kong. Raw data had been appropriately weighted when compiling statistical results.
Apart from collecting relevant information on the enterprises enumerated during the two reference periods, the statistical survey also collected wage information on individual employees of the enterprises to examine whether there were any changes in the wages and other employment conditions of the employees between the two periods before and after the implementation of SMW. Since a large number of data items of individual employees were collected and two reference periods were involved, the survey focused on collecting information on employees with wages below “specified wage levels” so as to reduce the reporting burden of the enterprises enumerated. In this statistical survey, “specified wage levels” were set at $11,500 per month (and $13,000 per month for Chinese restaurants) so as to cover about 70% of employees in the sub-sectors. In case there were one or more employee(s) in a particular rank with wages below the “specified wage level” in September 2011, the information on all employees in the same rank in the responding enterprises or outlet(s) (i.e. “target employees”\(^3\)) for the two reference periods would be collected.

Data collected at enterprise level was used mainly for data analysis with enterprises as the unit of analysis. For data collected in respect of target employees, the Study team filtered for “matched target employees”\(^4\) and conducted tracking data analysis with employees as the unit of analysis. Matched target employees were target employees working at the same rank with the same employment nature (i.e. full-time or part-time) in the same outlet in September 2010 and September 2011, and with wages below the “specified wage levels” in September 2010.

Of the 723 sampled enterprises covered by the statistical survey, 489 enterprises in different selected sectors/sub-sectors and with different sizes were successfully enumerated, covering about 60 000 employees (about 30 000 employees in each of the retail and restaurant sectors). The survey was mainly conducted during November 2011 to February 2012. The response rate was 67.6% (61.4% for the retail sector and 70.0% for the restaurant sector). Of the 657 outlets selected from the 489 enumerated enterprises, the Study team successfully collected wage information on some 7 000 employees, and information on 4 513 matched target employees was used for “analysis by matched target employee”.

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\(^3\) To facilitate identification of “target employees” by the responding enterprises, wage level of the more recent reference period (i.e. September 2011) was used as the basis of collecting statistical information.

\(^4\) This Study tracked changes of “organisational structures” in selected sectors before and after the implementation of SMW. The Study team used the wage level of “target employees” in September 2010 (i.e. before the implementation of SMW) for identifying “matched target employees” so as to cover more employees for analysis.
Survey Findings

Analysed by Enterprise

17. The statistical data analysed by responding enterprise covered all employees of the responding retail and restaurant enterprises.

Change in the number of ranks in enterprises

18. On the whole, the number of ranks in the responding restaurant enterprises was greater than that in retail enterprises. Comparing September 2011 with September 2010, analysed by size of enterprise, the average number of ranks in each of the retail sub-sectors did not show noticeable change. For the restaurant sector, except for the average number of ranks in large Hong Kong style tea cafés which decreased from 10.2 to 9.3, the number of ranks in other sub-sectors did not register noticeable change. The major ranks reduced in large Hong Kong style tea cafés were kitchen general workers and cleaners. Responding enterprises indicated that the reduction in ranks was due to staff turnover and unavailability of immediate replacement for the vacancies concerned.

Change in the number of employees by occupational group

19. Since different rank titles were used by enterprises, ranks were grouped together based principally on the duties of employees and with reference to the job description lists adopted in international and local statistical surveys. As there were indeed only a relatively small number of employees in certain occupational groups, occupational groups for the retail sector were subsequently re-grouped into four groups (viz. shop managers/supervisors and other related staff; sales and other related service workers; elementary workers; and technicians/operators). Occupational groups in the restaurant sector were re-grouped into another four groups (viz. restaurant supervisors, managers and other related staff; waiters/waitresses, cooks and other related service workers; dishwashers, kitchen general workers and other related elementary workers; and technicians/operators).

20. Analysed by occupational group, over 75% to nearly 95% of the responding retail enterprises did not show any noticeable change in the number of employees in September 2011 when compared with September 2010. At the same time, about 7.1% of the enterprises employed more technicians/operators, but 20.3% of the enterprises employed fewer sales and other related service workers. Responding retail enterprises indicated that the main reasons for employing more employees were business needs and increase in
business turnover. On the other hand, the main reasons for employing fewer employees were staff turnover together with recruitment difficulty and labour shortage in the sector owing to the implementation of SMW.

21. For the restaurant sector, when comparing the number of employees in different occupational groups in September 2011 with that in September 2010, over 75% to over 90% of the responding enterprises indicated that there had been no noticeable change. 12.7% and 11.2% of the enterprises employed more technicians/operators, and waiters/waitresses, cooks and other related service workers respectively. At the same time, 12.8% of the enterprises employed fewer waiters/waitresses, cooks and other related service workers. Responding restaurant enterprises indicated that the main reasons for employing more employees were business needs and increase in business turnover. On the other hand, the main reasons for employing fewer employees were staff turnover together with recruitment difficulty and labour shortage owing to the implementation of SMW, as well as increase in labour costs.

Change in the mix of full-time and part-time employees

22. In September 2011, the percentages of full-time and part-time employees in the responding retail enterprises were 72.4% and 27.6% respectively, comparable to the corresponding percentages in September 2010. Analysed by sub-sector, as a result of increase in the employment of part-time employees by the responding supermarkets and convenience stores, the percentage of part-time employees slightly increased by 3.5 percentage points, from 21.5% in September 2010 to 25.0% in September 2011. Responding retail enterprises indicated that more part-time employees were employed mainly because of labour shortage in the sector.

23. In September 2011, the percentages of full-time and part-time employees in the responding restaurant enterprises were 80.6% and 19.4% respectively. On the whole, the percentage of part-time employees increased from 16.2% in September 2010 to 19.4% in September 2011, slightly up by 3.2 percentage points. Analysed by sub-sector, the shares of full-time and part-time employees varied. The percentage of part-time employees in fast food cafés in September 2010 was 32.8%, higher than the corresponding percentages for all other restaurant sub-sectors. As a result of increase in the employment of part-time employees by the responding fast food cafés, the share of part-time employees in fast food cafés increased to 44.8% in September 2011, up by 12.0 percentage points. The shares of full-time and part-time employees in other restaurant sub-sectors largely remained the same. Responding restaurant enterprises indicated that more part-time employees were employed mainly because of labour shortage in the sector.
Change in the monthly wages range of full-time employees

24. Analysed by the lower quartile of minimum wages and the upper quartile of maximum wages in each occupational group in the responding retail and restaurant enterprises, the monthly wages ranges of full-time employees in all occupational groups generally recorded slight increases in September 2011 as compared with September 2010. Owing to differences in the degree of increases for the minimum and maximum wages across occupational groups, wage ranges were widened or narrowed to different extent, i.e. the differences in monthly wages between lower-paid employees (represented by the lower quartile of minimum wages) and higher-paid employees (represented by the upper quartile of maximum wages) in occupational groups increased or decreased.

25. For the retail sector, the monthly wages ranges of full-time shop managers/supervisors and other related staff, and technicians/operators were slightly widened. The monthly wages ranges of full-time sales and other related service workers, and elementary workers were slightly compressed.

26. For the restaurant sector, the monthly wages ranges of full-time restaurant supervisors, managers and other related staff, and technicians/operators were slightly widened. The monthly wages ranges of full-time waiters/waitresses, cooks and other related service workers, and dishwashers, kitchen general workers and other related elementary workers were slightly compressed.

Analysed by Matched Target Employee

27. The statistical data analysed by matched target employees covered all matched target employees of the responding retail and restaurant enterprises (see paragraph 15). A total of 756 matched target employees were covered by the responding retail enterprises. The majority of them were sales and other related service workers (79.0%). It was followed by technicians/operators (11.5%). The remaining were elementary workers (5.2%), and shop managers/supervisors and other related staff (4.4%). There were 3 757 matched target employees in total in the responding restaurant enterprises, with the majority being waiters/waitresses, cooks and other related service workers (70.7%). It was followed by dishwashers, kitchen general workers and other related elementary workers (19.5%). The remaining were restaurant supervisors, managers and other related staff (6.8%), and technicians/operators (2.9%).
Change in the monthly wages of matched target employees

28. The monthly wages of full-time matched target employees in the responding retail and restaurant enterprises were generally adjusted upwards in September 2011. The median monthly wages of full-time matched target employees in the retail and restaurant sectors were raised from $8,500 and $8,000 in September 2010 to $9,500 and $8,550 respectively in September 2011, representing increases of 11.8% and 6.9% respectively.

29. Comparing September 2011 with September 2010, an overwhelming majority of the matched target employees in the responding enterprises (retail: over 97%; restaurants: over 98%) recorded increases or no change in monthly wages. Only a small proportion of matched target employees (retail: 2.7%; restaurants: 1.6%) recorded decreases in monthly wages in September 2011 when compared with September 2010 owing to reduction in working hours. Nevertheless, for matched target employees with decreases in monthly wages, their entitlement to paid rest days and paid meal breaks remained unchanged.

Change in the distribution of hourly wage of matched target employees

30. For the retail sector, analysed by occupational group, the hourly wage distributions of all occupational groups in the responding enterprises recorded upward adjustments in September 2011 when compared with September 2010. Except for technicians/operators, the hourly wage distributions of all occupational groups were compressed, i.e. the differences in hourly wage between lower-paid employees (represented by the lower quartile of hourly wage) and higher-paid employees (represented by the upper quartile of hourly wage) in occupational groups were narrowed.

31. For the restaurant sector, analysed by occupational group, the hourly wage distributions of all occupational groups in the responding enterprises recorded upward adjustments and were compressed in September 2011 when compared with September 2010. The hourly wage distributions were notably compressed for restaurant supervisors, managers and other related staff; and dishwashers, kitchen general workers and other related elementary workers, i.e. the differences in hourly wage between lower-paid employees (represented by the lower quartile of hourly wage) and higher-paid employees (represented by the upper quartile of hourly wage) in occupational groups were narrowed.

Change in the monthly contractual working hours of matched target employees

32. The monthly contractual working hours of most of the matched target employees in the responding retail enterprises remained unchanged in September 2011 when compared
with September 2010. Analysed by occupational group, for matched target employees with changes in monthly contractual working hours, the percentage of employees with monthly contractual working hours reduced was higher for elementary workers (25.2%, mostly general workers and storekeepers). The median of the working hours reduced of these elementary workers was 12 hours per month, but their monthly wages still increased. Analysed by size of enterprise, these employees were engaged in large enterprises (17.2 percentage points) and small and medium enterprises (8.0 percentage points). Analysed by sub-sector, matched target employees with reduction in monthly contractual working hours mostly came from other retail stores. Responding enterprises indicated that the main reasons for reducing monthly contractual working hours were increase in labour costs owing to the implementation of SMW and increase in costs other than labour costs.

33. The monthly contractual working hours of most of the matched target employees in the responding restaurant enterprises remained unchanged in September 2011 when compared with September 2010. Analysed by occupational group, for matched target employees with changes in monthly contractual working hours, the percentages of employees with monthly contractual working hours reduced were higher for the following three occupational groups: dishwashers, kitchen general workers and other related elementary workers (12.4%); restaurant supervisors, managers and other related staff (9.8%); and waiters/waitresses, cooks and other related service workers (9.2%). The median of the working hours reduced of these employees was 25 hours per month. Among these 3 occupational groups, there were altogether 9.8% of employees with monthly contractual working hours reduced, but the monthly wages of an overwhelming majority of these employees either increased (6.2 percentage points) or remained unchanged (2.5 percentage points). There was no significant difference in the percentage of matched target employees with monthly contractual working hours reduced between the restaurant sector as a whole and its sub-sectors. Responding enterprises indicated that the main reasons for reducing monthly contractual hours were increase in labour costs owing to the implementation of SMW and increase in costs other than labour costs.

*Change in the basis of wage calculation of matched target employees*

34. Most of the matched target employees in both the retail and restaurant sectors were paid on monthly basis. The shares of employees paid on monthly basis were higher for managers/supervisors, technicians/operators and other related workers than those for other occupational groups. In the retail sector, there were about 76% and 22% of matched target employees paid on monthly and hourly basis in September 2011 respectively. Compared with September 2010, on the whole, the basis of wage calculation for matched target
employees in the responding retail enterprises did not show noticeable change. The share of matched target employees paid on hourly basis recorded a slight increase of 1.1 percentage points. For the restaurant sector, there were about 72% and 27% of matched target employees paid on monthly and hourly basis in September 2011 respectively. The share of matched target employees paid on hourly basis increased by 4.1 percentage points, from 22.9% in September 2010 to 27.0% in September 2011.

Change in matched target employees with paid rest days

35. In September 2010 and September 2011, 73.6% and 72.0% of matched target employees in the retail sector were entitled to paid rest days respectively. In September 2011, the percentage of matched target employees with paid rest days decreased slightly by 1.6 percentage points as compared with September 2010. Nevertheless, the monthly wages of matched target employees who were no longer entitled to paid rest days in September 2011 did not decrease as compared with September 2010.

36. For the restaurant sector, in September 2010 and September 2011, the percentages of matched target employees with paid rest days were 67.8% and 57.2% respectively. In September 2011, the percentage of matched target employees with paid rest days in the restaurant sector decreased by 10.6 percentage points (among them, large enterprises accounted for 5.8 percentage points while small and medium enterprises accounted for 4.8 percentage points; and the sub-sectors of Chinese restaurants, non-Chinese restaurants, fast food cafés and Hong Kong style tea cafés accounted for 1.7, 3.1, 3.9 and 1.9 percentage points respectively) as compared with September 2010. Analysed by occupational group, the percentages of employees with paid rest days in September 2011 for waiters/waitresses, cooks and other related service workers, and dishwashers, kitchen general workers and other related elementary workers decreased by 10.9 and 14.3 percentage points respectively as compared with September 2010. Only slight decreases were recorded for other occupational groups. The median of the number of paid rest days reduced was 4 days per month. Nevertheless, the monthly wages of matched target employees who were no longer entitled to paid rest days in September 2011 did not decrease as compared with September 2010.

Change in matched target employees with paid meal breaks

37. In the retail sector, in September 2010 and September 2011, 70.2% and 60.2% of matched target employees were entitled to paid meal breaks respectively. Comparing September 2011 with September 2010, the percentage of matched target employees in the retail sector with paid meal breaks decreased by 10.0 percentage points (among them, large enterprises accounted for 4.6 percentage points, while small and medium enterprises
accounted for 5.4 percentage points; and the sub-sectors of supermarkets and convenience stores, and other retail stores accounted for 4.0 and 6.0 percentage points respectively. Analysed by occupational group, the percentage of sales and other related service workers with paid meal breaks in September 2011 decreased by 11.9 percentage points when compared with September 2010. For other occupational groups, the percentages were at similar level, or recorded only slight decreases. Nevertheless, the monthly wages of matched target employees who were no longer entitled to paid meal breaks in September 2011 did not decrease as compared with September 2010.

38. For the restaurant sector, in September 2010 and September 2011, 87.2% and 85.4% of matched target employees were entitled to paid meal breaks respectively. Compared with September 2010, the percentage of matched target employees entitled to paid meal breaks slightly decreased by 1.8 percentage points in September 2011. Analysed by occupational group, the percentage of restaurant supervisors, managers and other related staff entitled to paid meal breaks in September 2011 decreased by 4.3 percentage points as compared with September 2010. There were only slight decreases for other occupational groups. Nevertheless, the monthly wages of matched target employees who were no longer entitled to paid meal breaks in September 2011 did not decrease as compared with September 2010.

Change in other fringe benefits of matched target employees

39. For other fringe benefits of matched target employees, there were no significant changes in those benefits enjoyed by larger proportion of employees. For the retail sector, in both September 2010 and September 2011, 41.6% of matched target employees were entitled to guaranteed year-end payment/bonus. In the restaurant sector, 85.3% of matched target employees enjoyed meal benefits in kind in September 2010, with the percentage slightly increased to 86.2% in September 2011.

40. For those benefits enjoyed by smaller proportion of employees, the extent of changes varied. In September 2010, 21.9% of matched target employees in the retail sector enjoyed meal benefits in kind. The figure decreased to 14.3% in September 2011. In September 2010, 13.3% of matched target employees in the retail sector were entitled to non-guaranteed bonus and allowance. The figure decreased to 9.2% in September 2011. In the restaurant sector, 8.7% of matched target employees enjoyed guaranteed year-end payment/bonus in September 2010. The percentage was similar to that of 8.8% in September 2011. In September 2010, 5.4% of matched target employees in the restaurant sector enjoyed other non-cash benefits (e.g. food for festivals). In September 2011, the situation generally remained the same and the corresponding figure was 5.3%.
41. Most of the enterprises indicated that meal breaks, shift breaks and training time offered in September 2011 were about the same as in September 2010. In the retail sector, all enterprises indicated that there was no change in meal breaks/shift breaks. In the restaurant sector, some 99% of enterprises indicated that meal breaks/training time remained unchanged.

*Change in the hourly wage of matched target employees (by hourly wage level of employees in September 2010)*

42. All matched target employees with hourly wage below $28 in September 2010 in the retail and restaurant sectors (accounting for 42.2% and 36.4% of matched target employees respectively) had significant wage increases in September 2011. The median hourly wage of employees concerned in the retail sector increased by 15.6%, from $25.0 to $28.9, and the median hourly wage of employees concerned in the restaurant sector increased by 17.2%, from $25.0 to $29.3. Responding enterprises indicated that the main reason for wage increase was compliance with the Minimum WageOrdinance.

43. For matched target employees with hourly wage at $28 or above in September 2010, 45.2% of employees in the retail sector and 55.8% in the restaurant sector had wage increases in September 2011. The median hourly wage of the retail sector increased from $33.3 to $36.7, up by 10.2%, while the median hourly wage of the restaurant sector increased from $31.1 to $35.0, up by 12.5%. Responding enterprises indicated that the main reasons for wage increases were staff turnover together with recruitment difficulty and labour shortage in the sector owing to the implementation of SMW.

*Change in the monthly contractual working hours of matched target employees (by hourly wage level of employees in September 2010)*

44. For matched target employees in the retail and restaurant sectors with hourly wage below $28 in September 2010, 6.4% (for retail) and 14.9% (for restaurants) had their monthly contractual working hours reduced. But at the same time, 5.3% (for retail) and 3.1% (for restaurants) of matched target employees had increases in monthly contractual working hours.

45. For matched target employees with hourly wage at $28 or above in September 2010, 8.5% (for retail) and 6.6% (for restaurants) had their monthly contractual working hours reduced respectively. At the same time, 2.1% (for retail) and 2.6% (for restaurants) of matched target employees had increases in monthly contractual working hours.
Business Outlook for March 2012 as Compared with September 2011 at the Time of Enumeration and Other Opinions

46. In both the retail and restaurant sectors, over 80% of the responding enterprises anticipated no change in employees’ wages in March 2012 as compared with September 2011 at the time of the interview. Besides, in the retail and restaurant sectors, 9.1% and 16.7% of the responding enterprises respectively anticipated further increases in wages in March 2012 as compared with September 2011 for employees with hourly wage below $28 in September 2010. The main reasons were staff turnover together with recruitment difficulty and labour shortage in the sector owing to the implementation of SMW.

47. For employees with hourly wage at $28 or above in September 2010, 12.2% and 14.3% of the responding enterprises in the retail and restaurant sectors respectively indicated that they envisaged wage increases for these employees, mainly caused by staff turnover together with recruitment difficulty and labour shortage in the sector owing to the implementation of SMW.

48. In both the retail and restaurant sectors, an overwhelming majority (nearly or over 90%) of the responding enterprises anticipated no change in March 2012 as compared with September 2011 in all aspects of work arrangements for employees, including the number of employees in each rank, as well as contractual working hours, meal breaks, shift breaks and training time. Besides, in the retail and the restaurant sectors, 7.2% and 7.6% of the responding enterprises respectively indicated that they would increase the number of employees in each rank. The main reasons were business needs and increase in business turnover. As regards contractual working hours, only a few responding enterprises (3.3%) in the retail sector envisaged reduction in contractual working hours. The main reason was increase in labour costs owing to the implementation of SMW. For other work arrangements including meal breaks, shift breaks and training time, nearly all responding enterprises indicated that they anticipated no change.

49. The responding enterprises in the retail and restaurant sectors indicated that other major impacts of the implementation of SMW included difficulties in recruitment (for instance, labour shortage, difficulty in recruiting grassroots employees involving mainly kitchen general workers, dishwashers and cleaners), and increase in operating costs (for instance, increase in labour costs and worry over difficulties in business operation, especially in times of economic downturn).

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5 The survey was mainly conducted from November 2011 to February 2012.
Analysis on Knock-on Effect

50. Based on the distribution of hourly wage of matched target employees, a cut-off point for those employees affected by the knock-on effect was estimated in the following manner. First of all, for each selected sector, the hourly wages of all matched target employees in September 2010 were arranged in ascending order from the lowest to the highest. Secondly, all matched target employees were divided into 10 groups based on the percentile hourly wage. The rate of change in hourly wage of each matched target employee in September 2011 over September 2010 was then computed. Finally, the median of the rate of change in hourly wage of matched target employees in each group was analysed in order to derive the hourly wage cut-off point for matched target employees affected by the knock-on effect in each selected sector and sub-sector. Based on the above estimation, in the retail sector, the hourly wage cut-off point in September 2011 was $33.3 (those for supermarkets and convenience stores, and other retail stores were $32.0 and $33.3 respectively). For the restaurant sector, the hourly wage cut-off point in September 2011 was $32.2 (those for Chinese restaurants, non-Chinese restaurants, fast food cafés and Hong Kong style tea cafés were $32.0, $31.2, $33.3 and $30.0 respectively).

51. The impact of knock-on effect was estimated by breaking down the wage increase of matched target employees affected by the knock-on effect into three components, viz. compliance with the SMW rate of $28 per hour (impact of SMW compliance), impact of wage adjustment, and impact of knock-on effect. It should be noted that apart from the impact of knock-on effect related to pay hierarchies, the above impact of knock-on effect in the retail and restaurant sectors might also be affected by other factors such as competing labour demand among different sectors.

52. Based on the above estimation, for matched target employees affected by the knock-on effect in the retail sector with hourly wage less than $33.3 in September 2011, their wages increased on average by 11.8% as compared with September 2010. Out of the 11.8%, 3.1 percentage points were estimated to be attributable to the knock-on effect. As regards the restaurant sector, for matched target employees affected by the knock-on effect with hourly wage less than $32.2 in September 2011, their wages increased on average by 13.6% as compared with September 2010. Out of the 13.6%, 3.5 percentage points were estimated to be attributable to the knock-on effect.

53. Of the sub-sectors in the retail sector, the average wage increase of matched target employees affected by the knock-on effect in supermarkets and convenience stores, and other
retail stores were 10.7% and 13.3% respectively, of which 3.4 and 2.9 percentage points were estimated to be attributable to the knock-on effect.

54. For the restaurant sub-sectors, the average wage increase of matched target employees affected by the knock-on effect in the restaurant sub-sectors ranged from 8.3% to 20.7% (those for Chinese restaurants, non-Chinese restaurants, fast food cafés and Hong Kong style tea cafés were 8.3%, 11.0%, 20.7% and 15.2% respectively), of which 2.7 percentage points (for Chinese restaurants), 3.3 percentage points (for non-Chinese restaurants), 5.1 percentage points (for fast food cafés) and 1.2 percentage points (for Hong Kong style tea cafés) were estimated to be attributable to the knock-on effect.

**Conclusion**

55. This Study reviewed and summarised the related literature and researches on knock-on effect on pay hierarchies owing to the implementation of SMW and the experience of other economies. A retrospective survey covering two reference periods before and after the implementation of SMW (September 2010 and September 2011 respectively) was also conducted to examine the “organisational structures” (including rank and pay structures, remuneration packages and fringe benefits, wage and its distribution, working hours, etc) in the retail and restaurant sectors in Hong Kong and their empirical changes, and whether the changes were caused by the implementation of SMW. It also assessed the impact of knock-on effect of SMW on pay hierarchies of enterprises in different sub-sectors and of different sizes in the retail and restaurant sectors.

56. Analysed at enterprise level, the statistical survey in this Study covered all employees in the responding enterprises in the retail and restaurant sectors in order to examine the number of ranks in the enterprises, the number of employees by occupational group, the mix of full-time and part-time employees, and the monthly wages range of full-time employees. According to the statistical survey findings, Table 1 sets out the major observations:
### Table 1: Major observations from analysis by responding enterprise

<table>
<thead>
<tr>
<th></th>
<th>Retail Sector</th>
<th>Restaurant Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of ranks</strong></td>
<td>➢ No noticeable change</td>
<td>➢ Apart from large Hong Kong style tea cafés of which the average number of ranks decreased from 10.2 to 9.3, there was no noticeable change in other sub-sectors</td>
</tr>
</tbody>
</table>
| **Number of employees by occupational group** | ➢ Some enterprises reported increases or decreases in the numbers of employees in occupational groups  
➢ The main reasons for increase were business needs and increase in business turnover  
➢ The main reasons for decrease were staff turnover together with recruitment difficulty and labour shortage in the sector owing to the implementation of SMW | ➢ Some enterprises reported increases or decreases in the numbers of employees in occupational groups  
➢ The main reasons for increase were business needs and increase in business turnover  
➢ The main reasons for decrease were staff turnover together with recruitment difficulty and labour shortage in the sector owing to the implementation of SMW, as well as increase in labour costs |
| **Mix of full-time and part-time employees** | ➢ The overall share was about the same in both reference periods  
➢ Analysed by sub-sector, there was a relatively larger increase in the share of part-time employees in supermarkets and convenience stores in September 2011. The main reason was labour shortage in the sector, hence the need to recruit more part-time employees | ➢ The share of part-time employees slightly increased in September 2011  
➢ Analysed by sub-sector, there was a relatively larger increase in the share of part-time employees in fast food cafés. The main reason was labour shortage in the sector, hence the need to recruit more part-time employees |
| **Monthly wages range of full-time employees** | ➢ Wage ranges of all occupational groups were slightly adjusted upwards on the whole | ➢ Wage ranges of all occupational groups were slightly adjusted upwards on the whole |
The statistical survey in this Study also analysed statistical data covering 4,513 matched target employees. The analyses by matched target employee enabled us to examine the changes in the monthly wages, the distribution of hourly wage, the monthly contractual working hours, the basis of wage calculation, the share of employees with paid rest days and paid meal breaks, and other fringe benefits of these employees, as well as the changes in the wages of employees with hourly wage below $28 and those at $28 or above in September 2010, etc. Table 2 sets out the major observations based on the statistical survey findings:

<table>
<thead>
<tr>
<th></th>
<th>Retail Sector</th>
<th>Restaurant Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monthly wages</strong></td>
<td>An overwhelming majority of the employees had their monthly wages increased or remained unchanged</td>
<td>An overwhelming majority of the employees had their monthly wages increased or remained unchanged</td>
</tr>
<tr>
<td></td>
<td>Monthly wages of full-time employees were generally adjusted upwards</td>
<td>Monthly wages of full-time employees were generally adjusted upwards</td>
</tr>
<tr>
<td><strong>Distribution of hourly wage</strong></td>
<td>Generally adjusted upwards</td>
<td>Generally adjusted upwards</td>
</tr>
<tr>
<td><strong>Monthly contractual working hours</strong></td>
<td>Except for elementary workers, there was no noticeable change in the monthly contractual working hours of employees in other occupational groups</td>
<td>There was no noticeable change in the monthly contractual working hours of technicians/operators. 9.8% of employees in other occupational groups had their monthly contractual working hours reduced, but the monthly wages of an overwhelming majority of these employees either increased (6.2 percentage points) or remained unchanged (2.5 percentage points)</td>
</tr>
<tr>
<td><strong>Basis of wage calculation</strong></td>
<td>In September 2011, about 76% and 22% of employees were paid on monthly and hourly basis respectively</td>
<td>In September 2011, about 72% and 27% of employees were paid on monthly and hourly basis respectively</td>
</tr>
<tr>
<td></td>
<td>The percentage of employees paid on hourly basis increased by 1.1 percentage points as compared with September 2010</td>
<td>The percentage of employees paid on hourly basis increased by 4.1 percentage points as compared with September 2010</td>
</tr>
<tr>
<td>Share of employees with paid rest days</td>
<td>Retail Sector</td>
<td>Restaurant Sector</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>About the same</td>
<td></td>
<td>Other than waiters/waitresses, cooks and other related service workers (decreased by 10.9 percentage points) and dishwashers, kitchen general workers and other related elementary workers (decreased by 14.3 percentage points), the share was about the same for other employees</td>
</tr>
<tr>
<td>The median of the number of paid rest days reduced was 4 days per month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The monthly wages of employees who were no longer entitled to paid rest days in September 2011 did not decrease as compared with September 2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Share of employees with paid meal breaks</th>
<th>Retail Sector</th>
<th>Restaurant Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other than sales and other related service workers (decreased by 11.9 percentage points), the share was about the same for employees in other occupational groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The monthly wages of employees who were no longer entitled to paid meal breaks in September 2011 did not decrease as compared with September 2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>About the same</td>
<td></td>
<td>About the same</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other fringe benefits</th>
<th>Retail Sector</th>
<th>Restaurant Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the same</td>
<td></td>
<td>About the same</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employees with hourly wage below $28 in September 2010</th>
<th>Retail Sector</th>
<th>Restaurant Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>All had increases in wages</td>
<td></td>
<td>All had increases in wages</td>
</tr>
<tr>
<td>The median hourly wage in September 2011 was $28.9</td>
<td></td>
<td>The median hourly wage in September 2011 was $29.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employees with hourly wage at $28 or above in September 2010</th>
<th>Retail Sector</th>
<th>Restaurant Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.2% of them had increases in wages. Their median hourly wage in September 2011 was $36.7</td>
<td></td>
<td>55.8% of them had increases in wages. Their median hourly wage in September 2011 was $35.0</td>
</tr>
</tbody>
</table>
58. Regarding the assessment of the impact of knock-on effect of SMW, for matched target employees affected by the knock-on effect in the retail sector with hourly wage less than $33.3 in September 2011, their wages increased on average by 11.8% as compared with September 2010, of which 3.1 percentage points were estimated to be attributable to the knock-on effect. In the restaurant sector, for matched target employees affected by the knock-on effect with hourly wage less than $32.2 in September 2011, their wages increased on average by 13.6% as compared with September 2010, of which 3.5 percentage points were estimated to be attributable to the knock-on effect. Apart from the impact of knock-on effect related to pay hierarchies, the above impact of knock-on effect in the retail and restaurant sectors might also be affected by other factors such as competing labour demand among different sectors.
Appendix | Glossary

The major terms used in this Study and their definitions are listed below.

1. **Employee**
   This refers to employee covered by the Employment Ordinance, which applies to all employees with the following exceptions:
   (i) a family member who lives in the same dwelling as the employer;
   (ii) an employee as defined in the Contracts for Employment Outside Hong Kong Ordinance;
   (iii) a person serving under a crew agreement under the Merchant Shipping (Seafarers) Ordinance, or on board a ship which is not registered in Hong Kong; and
   (iv) an apprentice whose contract of apprenticeship has been registered under the Apprenticeship Ordinance.

   An employee is regarded as a **part-time employee** if one of the following conditions is met:
   (i) the number of usual days of work per week is less than 5 (for a person with a fixed number of working days per week); or
   (ii) the number of usual hours of work per working day is less than 6 (for a person with a fixed number of working days per week); or
   (iii) the number of usual hours of work per week is less than 30 (for a person without a fixed number of working days per week).

   However, persons who usually work 24 hours per shift are excluded, regardless of the number of usual days of work per week.

   If an employee cannot be classified as a part-time employee according to the above criteria, the employee is treated as a **full-time employee**.

2. **Target Employee**
   If there is (are) one or more employee(s) in a particular rank with monthly wages below a “specified wage level” in September 2011, all employees of this rank in the responding enterprise or outlet(s) will be treated as target employees. The “specified wage levels” are as follows:
   - Chinese restaurants $13,000
   - Retail sector and other restaurants $11,500
3. **Matched Target Employee**
Matched target employee refers to target employee who works at the same rank, with same employment nature (i.e. full-time or part-time), in the same outlet in September 2010 and September 2011, and with wages below the “specified wage levels” in September 2010.

4. **Monthly wages**
Monthly wages are the sum of the following items:

(i) **Basic wage**
Basic wage refers to contractual/agreed wage before deducting employee’s contribution to provident fund/Mandatory Provident Fund; but not including bonus, commission, overtime allowance, good attendance bonus, tips and service charges, and other allowances.

Some employees who are paid on hourly/daily basis may only have contractual/agreed hourly wage/daily wage. Their wages in a month will depend on the actual number of working hours/working days in the month. Under such circumstances, wages actually paid to the employee in the reference month will be treated as monthly basic wage.

(ii) **Guaranteed bonus and allowance**
Guaranteed bonus and allowance refers to guaranteed bonus and allowance (e.g. shift allowance, meal allowance, grooming allowance, and good attendance bonus not of gratuitous nature) paid to an employee on top of basic wage, regardless of the gain or loss of the enterprise.

(iii) **Commission and tips (non-gratuitous nature)**
Commission refers to the guaranteed payment for sales and related personnel in accordance with their sales volume achieved, either individually or as a group, regardless of the gain or loss of the enterprise as a whole. (Note: Commission is different from profit-sharing bonus, which is the amount paid to employees depending on the amount of profit of the enterprise.)

Tips refers to the amount gathered by the enterprise and then distributed among the service or related personnel. The amount paid directly by customers to service or related personnel, apart from those recognised by the employer as part of the employee’s wage, should be excluded.
(iv) Overtime allowance
Overtime allowance refers to the allowance paid to an employee for his/her work outside contractual/agreed working hours, and such attendance at the place of employment is made in accordance with the contract of employment or with the agreement or at the direction of the employer.

(v) Additional remuneration paid to an employee to meet the minimum wage requirement
This refers to the balance paid to an employee by the enterprise if wages payable to the employee in respect of the wage period are less than the minimum wage according to the Minimum Wage Ordinance.

5. Guaranteed Year-end Payment/Bonus
Guaranteed year-end payment/bonus refers to guaranteed payment to an employee at the end of a year, regardless of the gain or loss of the enterprise.

6. Non-guaranteed Bonus and Allowance
Non-guaranteed bonus and allowance refers to bonus and allowance paid to an employee of gratuitous nature (e.g. good attendance allowance of gratuitous nature) on top of basic wage.

7. Contractual Working Hours
Working hours include any time when the employee is, in accordance with the contract of employment or with the agreement or at the direction of the employer:
(i) in attendance at a place of employment, irrespective of whether he is provided with work or training at that time; or
(ii) travelling in connection with his/her employment, excluding travelling (in either direction) between his/her place of residence and his/her place of employment, other than a place of employment that is outside Hong Kong and is not his/her usual place of employment.

A place of employment means any place at which the employee is, in accordance with the contract of employment or with the agreement or at the direction of the employer, in attendance for the purpose of doing work or receiving training.

Contractual working hours refers to the working hours specified in the employment contract or agreed with the employer. This will not be affected by factors such as absence, overtime work, inclement weather, on strike, on leave, etc. In other words, it
is assumed that the employee is on duty every working day in the month, and does not take annual leave, maternity leave, sick leave, etc. If the employee has no fixed contractual working hours, the actual working hours in the month will be treated as contractual working hours.

8. **Hourly Wage**

Hourly wage is derived by dividing the monthly wages (after deducting the payment for rest days and payment for meal breaks that are not regarded as working hours) by the total monthly working hours. Total monthly working hours include contractual working hours of the month (covering meal breaks that are regarded as working hours) and overtime hours.