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Another Look at East Asian Development**

Günseli Berik

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University of Utah  
Department of Economics  
1645 East Central Campus Dr., Rm. 308  
Salt Lake City, UT 84112-9300  
Tel: (801) 581-7481  
Fax: (801) 585-5649  
<http://www.econ.utah.edu>

## **Growth with Gender Inequity: Another Look at East Asian Development**

Günseli Berik  
University of Utah,  
Department of Economics and Gender Studies Program  
berik@economics.utah.edu

### **Abstract**

This brief gendered history of Taiwan's and Korea's labor markets indicates a recent reversal in the persistent gender wage gaps that were long sustained by state policies that created and reproduced surplus labor conditions. The relative decline of manufacturing employment since the mid/late 1980s was accompanied by a generalized improvement in women's relative wages. However, gender wage inequality and women's low wages continue to be important policy variables, given the concentration of women in lower-paying and less secure occupations and sectors, Korea's more limited and stalled progress toward gender wage equality, recent signs of downward harmonization of wages in Taiwan's largest sectors, and ongoing employment discrimination against women. Policies must tackle employment discrimination, improve women's labor market skills, support women's caring work in the home to ensure their equitable pursuit of employment, and create gender equitable old-age security systems.

**Key words:** gender wage inequality, discrimination, economic development, Korea, Taiwan.

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## Introduction

The Republic of Korea and the Taiwan Province of China stand out as success stories of economic development. Since the 1960s they have not only sustained growth on the basis of export-oriented manufacturing but have also maintained a relatively equitable income distribution and achieved high levels of well-being. The policies that shaped the East Asian development path have become the subject of intense debate.<sup>1</sup> In the early 1990s, this debate produced broad consensus regarding the considerable divergence from orthodox economic policies, albeit disagreement on the key policies that produced the economic success of Taiwan and Korea and their replicability elsewhere remained (World Bank 1993; Chang 2003). Studies of East Asian development through a gender lens also generated a parallel consensus on women's roles in the development strategy adopted and the gender-differentiated effects. There is widespread recognition that export-oriented growth in the 1960s and 1970s was fuelled by massive recruitment and the deployment of women as low-wage workers in labour-intensive manufacturing, and that this process produced gender earnings inequalities that persisted into the 1980s and early 1990s, in spite of women's relative gains in education and labour-market experience.<sup>2</sup> Some scholars have attributed the persistence of earnings inequalities to the imperative of maintaining export competitiveness in labour-intensive industries on the basis of women's lower-paid labour,<sup>3</sup> while others have drawn attention to the lingering effects of employers' misperceptions about women's lower productivity relative to men (Behrman and Zhang 1995).

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<sup>1</sup> See Chang (2003) for an overview of the evolution of the debate.

<sup>2</sup> See, for example, Cheng and Hsiung (1998) and Seguino (2000a) for central arguments, and Bauer (2001a) and Mason (2001) for more muted recognition.

<sup>3</sup> Greenhalgh 1985; Nam 1994; Seguino 1997, 2000a.

This study reviews the gendered development history of Korea and Taiwan, with particular attention to developments since the early 1990s. In assessing progress toward gender parity in the labour market, this study provides an overview since the 1960s across sectors, not just manufacturing. It seeks to assess the evidence on the effects of structural change, macroeconomic policies and industry-level changes on gender earnings differentials. Taiwan and Korea provide interesting cases since they are among the few developing countries that have moved beyond labour-intensive, export-oriented manufacturing. Korea in the 1980s and Taiwan in the 1990s moved toward more diversified manufacturing, based on greater skill- and capital-intensive products, and they are now fast becoming service-oriented economies and are not relying as much on low-wage, less skilled labour to fuel their industrialization. Both economies liberalized their trade and capital accounts, following which, much of their labour-intensive manufacturing moved to China and Southeast Asia. These changes in labour demand, combined with a narrowing of education gender gaps and sustained economic growth, presented the possibility of reducing earnings differentials between male and female workers. Yet a strong body of evidence suggests that these expectations were not met until the early 1990s. In Taiwan occupational shifts toward high-skill manufacturing and service employment, trade liberalization, and the relocation of labour-intensive manufacturing over the late 1970s to the early 1990s were associated with rising earnings differentials, even after controlling for gender differences in education and experience.<sup>4</sup>

We have a less clear understanding of the gendered implications of shifts in policy and the structure of production since the early 1990s. This paper shows that in both economies there has been a trend increase in women's relative earnings, in Korea since the late 1970s and in Taiwan since the early 1990s. The trend holds in manufacturing, where a defeminization of

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<sup>4</sup> Zveglic and Rodgers 2004; Berik et al. 2004; Seguino 2000b.

employment is under way, and also in the growing service sectors, where women's share of employment is increasing. However, gender earnings inequality is greater in Korea than in Taiwan, and the improvement in women's relative earnings in Korea stalled after the Asian financial crisis. Moreover, the trend improvement in relative earnings has been accompanied by employment discrimination against women.

This paper argues that ongoing discrimination in the 1990s and in the early 2000s is sustained by the effects of past discrimination, weak enforcement of the new equal employment legislation and increased competition associated with trade and capital account liberalization. If the upward trend in women's relative earnings is to continue and women's economic livelihoods are to become more secure, governments will need to enforce antidiscrimination legislation and pursue policies that help women balance their family responsibilities and paid work, train women for a broader range of well-paying jobs and increase their old-age security. Key to implementing this policy agenda for gender equity is pressure from women's groups and unions to reorient the longstanding role of governments, which until recently have been instrumental in perpetuating gender earnings inequalities.

## **The triumph of governing the market**

### **Industrialization, growth and structural change**

Since the 1960s Korea and Taiwan achieved spectacular growth by initiating and managing manufacturing for export.<sup>5</sup> While Korea experienced a sharp downturn caused by the financial

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<sup>5</sup> During the 1970–2002 period, Taiwan recorded its sole negative real growth rate in 2001, while Korea registered negative real growth rates only in 1980 and 1998. In the slower growth decade of the 1990s, GDP per capita in

crisis of 1997–1998, that recession was short lived. Their macroeconomic achievement was the outcome of an approach that significantly diverged from the neoliberal guidelines for sound policies. Both economies sought to establish and extend international competitiveness through selective industrial policy, that is, strategic state interventions to support export-oriented industries and firms and foster their competitiveness, with a high degree of discretionary power exercised by bureaucrats.<sup>6</sup> The way that labour markets functioned was a crucial ingredient in the making of East Asian macroeconomic success. Most economists comment favourably on their “undistorted” or “flexible” nature, characterized by the absence of effective minimum wages and a lack of government support for union activity (Krueger 1995; Ranis 1995). Others highlight the active involvement of the government in creating this labour-market flexibility.<sup>7</sup> Wage growth was held in check by government policies that made it possible for firms to tap into new supplies of low-wage labour and that severely restricted labour rights in the 1960s and 1970s. These policies created an environment free of labour problems for business, especially for the foreign-invested companies in export-processing zones (EPZs).

From the early 1970s onward, both governments supported the development of dynamic comparative advantage and backward linkages by firms, which helped move domestic industries up the technological ladder in the 1980s and 1990s. In the early 1970s, Korea embarked on a policy to support large-scale, capital-intensive industries organized under the control of conglomerates, while Taiwan relied on small and medium-sized firms, dispersed throughout the island, to spearhead its industrial development.

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Taiwan and Korea grew by 6.4 per cent and 6.2 per cent respectively (Directorate General of Budget, Accounting and Statistics [DGBAS] 2003a; Bank of Korea 2005).

<sup>6</sup> (Amsden 1989; Wade 1990; Rodrik 1995; Lall 1996). By contrast, the World Bank (1993) contends that industrial policy was neither necessary nor beneficial for the economic success of Korea and Taiwan, and highlights unique features of their histories and culture to conclude the non-replicability of the development strategy.

<sup>7</sup> Galenson 1979; Deyo et al. 1987; Nam 1994.

Both economies practiced “strategic openness” in that they supported export industries along with relatively free trade in inputs for these industries and infant industry protection (Singh 1997). They restricted foreign direct investment (FDI) and sought technology transfers via licensing arrangements. Under pressure from the United States and as part of the bid for membership in the World Trade Organization (WTO), in the mid-1980s both governments reduced trade restrictions and capital controls. In Taiwan trade liberalization generated a rapid expansion of imports that accompanied continued export growth, whereas Korea’s import share remained relatively constant, and its export share declined in the early 1990s.<sup>8</sup> Taiwan’s removal of foreign exchange controls in 1985 resulted in the rapid expansion of domestic firms’ outward FDI in Southeast Asia and China. By relocating labour-intensive production abroad and retaining the high-technology/capital-intensive stages, firms sought to lower labour or resource costs and extended their international competitiveness (Chen 1998). Korea’s capital account liberalization in 1991 brought about similar capital mobility but also the instability that culminated in the financial crisis of 1997.

In spite of their slightly divergent paths, the managed export-led growth strategy transformed Taiwan and Korea from agrarian societies into industrial economies, and ultimately, into service economies.<sup>9</sup> While the relative importance of the manufacturing industry as a source of employment and output is in decline, this sector continues to be a major employer and a dynamic source of labour-productivity growth and export earnings.

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<sup>8</sup> Between 1985 and 1999, Taiwan’s total trade in manufactures (imports plus exports) as a share of output grew from 51 per cent to 84 per cent, while Korea’s trade share declined from 49 per cent to 44 per cent (Australian National University [ANU] 2001).

<sup>9</sup> In 2004 services generated 67 per cent of Taiwan’s and 56 per cent of Korea’s GDP, by which time agriculture’s share of GDP had declined to 2 per cent and 3 per cent, respectively. The share of manufacturing in GDP was 27 per cent in Taiwan and 28 per cent in Korea (DGBAS 2005a; Bank of Korea 2005).

## **Growth with well-being and equity**

Growth creates the potential to improve the quality of people's lives, but it requires judicious policies to deliver these improvements. If we are to judge the success of economic strategies and associated policies on the basis of the changes they make in people's lives (Sen 1999), then Korea and Taiwan have done remarkably well. The rapid increases in per capita income in Taiwan and Korea were accompanied by a decline in poverty, relatively low rates of income inequality and impressive achievements by international standards in the basic capabilities of health and education.<sup>10</sup> These improvements in well-being were made possible not only by the rapid job growth in manufacturing, especially in labour-intensive industries, but also by the planned use of resources for population, health and education policies.

Job growth is undoubtedly central to improving the livelihoods and capabilities of individuals in societies where most people are dependent on wages. Rapid job creation associated with labour-intensive manufacturing in Korea and Taiwan kept unemployment rates low by international standards.<sup>11</sup> This job creation occurred even during contractions of the world economy that made exports susceptible to sharp declines. Even after these economies moved out of labour-intensive manufacturing, both governments promoted full-employment policies as a surrogate for social policies to prop up living standards, provided very limited social safety nets and were slow in developing policies to respond to unemployment and old-age security (Cho et al. 2004; Kwon 2005). The counterpart of selective industrial policy was a selective social policy that sought to provide welfare to workers in large-scale industrial firms

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<sup>10</sup> United Nations Development Programme (UNDP) 2003; Bauer 2001b; Tang 1998.

<sup>11</sup> In Korea over the 1969–2004 period, the highest unemployment rate was 6.8 per cent in 1998, while the lowest unemployment rate was 3.2 per cent in 1978 (International Labour Organization [ILO] 2005). In Taiwan the highest recorded open unemployment rate since the early 1950s was 5.2 per cent in 2002, and the lowest rate was 1.27 per cent in 1979 (DGBAS 2002).

and government employees and promoted the family as the source of welfare in times of need.<sup>12</sup> Along with restrictions on union activity, this type of social policy is seen as important for promoting industrial stability (Kwon 2005).

Rising per capita income was accompanied by relatively low income inequality in the 1960s and 1970s. Taiwan, in particular, is viewed as having achieved remarkable growth rates while also reducing income inequality among households in this period (Ranis 1995).<sup>13</sup> In the 1950s low inequality was achieved due to the implementation of land reforms and a high literacy rate. This strategy was followed by an emphasis on compulsory, universal primary education and basic health care, which are now widely believed to have contributed to the subsequent economic growth, poverty reduction and relatively low level of income inequality (Sen 1999; Bauer 2001b). However, in both economies economic growth was eventually accompanied by rising income inequality; a slow but steady rise in income inequality has been under way in Taiwan since 1979 and in Korea since the financial crisis of the late 1990s.<sup>14</sup>

Population policy also contributed to improvements in well-being. The demographic success of Korea and Taiwan is all the more remarkable given that in the 1950s and early 1960s, neither the demographic conditions nor government population policies seemed conducive to rapid economic development (Feeney and Mason 2001; Tsai 2001). The government's stance in

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<sup>12</sup> Firm-level occupational welfare and vocational training programs, employment security, and seniority-based remuneration systems rewarded workers' loyalty to the firm (Kwon 2005).

<sup>13</sup> Among a group of developing economies at a similar stage of development in the 1950s, Taiwan stood out with its combination of rapid average growth and even faster rise in the income share of its lowest income strata over the next decade, while Korea's rapid growth was commensurate with growth in the incomes of its low-income population, producing no change in level of inequality (Todaro and Smith 2006:218).

<sup>14</sup> In Taiwan the income gap between the richest 20 per cent of the population and the poorest 20 per cent increased from 4.2-fold to 6.4-fold between 1979 and 2001, while in Korea this ratio declined from its peak of ninefold in 1980 to fivefold in 1996, rising again to 6.8-fold in 2000. Other measures of inequality are consistent with these trends (Council for Economic Planning and Development [CEPD] 2003; DGBAS 1998; Korea National Statistical Office [KNSO] 2003). The widening gap between real earnings growth and productivity growth in manufacturing since the late 1990s, especially in Taiwan, is also consistent with rising inequality (DGBAS 1991, 1997, 2005a; US Bureau of Labor Statistics [BLS] 2006).

the 1950s and 1960s was strongly pro-birth. High fertility, high infant mortality and low life expectancy characterized both societies. Starting in the early 1960s, Korea and Taiwan were among the first few developing nations to introduce policies aimed at reducing fertility and also among the first to achieve low fertility and near zero population growth (Mason 2001). Each government pursued a multifaceted approach to reduce fertility, focusing on family planning education, cooperation with non-governmental organizations (NGOs) and the low-cost provision of contraceptive services. Both promoted family planning as part of their strategy of boosting per capita income, rather than as a response to popular demand.<sup>15</sup> Over time, however, women appeared to exercise greater reproductive choice; fertility continued to decline in the 1990s and early 2000s, after the end of official family planning policies and the decline in agricultural livelihoods, in a context where contraceptive choices were available (table 1).<sup>16</sup>

### **Place Table 1 About here**

As shown in table 1, the decrease in birth rates, combined with growing public spending on health care and improved public health facilities, contributed to rapid declines in maternal and infant mortality (Yousefi 1997). In turn, lower infant mortality provided a further incentive for families to have fewer children. Investment in health care also contributed to the increase in life expectancy in both societies, with the characteristic gender difference that favours women (table 1).

Educational policies complemented the health and population policies. Korea and Taiwan devoted a growing share of output and government spending to education, and education policy

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<sup>15</sup> In the early years of the implementation of the national family planning programme, coercive elements may have contributed to women “choosing” to have fewer children (Cho 1997), as has been seen in the family planning histories of other countries, for example Beutelspracher et al. (2003).

<sup>16</sup> The decline in the total fertility rate from 5.5 births per woman in 1965 in Taiwan and 5.4 births in the early 1960s in Korea (Feeney and Mason 2001) to the current low levels (of 1.2 births per woman in 2003 in both countries) may be viewed as women’s achievement of freedom from continuous childbearing.

made a significant contribution to rapid growth and a low level of income inequality.<sup>17</sup> In Taiwan, in particular, educational policies evolved in tandem with the emerging needs of the economy, shifting the emphasis on literacy and compulsory universal primary education in the 1950s and early 1960s, to vocational education at the secondary level in the late 1960s and early 1970s, and ultimately to science and engineering at the tertiary level from the mid-1970s (Ranis 1995). These policies delivered a rapid, gender-equitable increase in educational enrolments and attainment, closing or narrowing gender gaps in several indicators (table 1). However, inequalities continued in certain fields of specialization in both vocational high school education and university education.<sup>18</sup>

The blemish in this record of improved well-being is the recent emergence of high population sex ratios at birth (that is, males per 100 females) that overshadow and contrast with the absolute achievements in the health status of women (table 1).<sup>19</sup> Along with China and India, Korea and Taiwan have a serious “missing girls” problem, which is a key indicator of societal discrimination against women (Croll 2000; Park and Cho 1995). The shortfall of girls appears at birth, indicating the use of sex-selective abortions. This problem emerged in the mid-1980s as the unforeseen side effect of declining fertility in the context of strong son preference: as couples have fewer children, they choose sons over daughters.<sup>20</sup> One explanation for this outcome emphasizes the resistance of religious norms and kinship structures to economic changes, given that the problem appeared after more than two decades of rapid growth, industrialization,

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<sup>17</sup> Woo 1991; Yousefi 1997; Gindling and Sun 2002.

<sup>18</sup> Rodgers et al. 2006; Cheng and Hsiung 1998; Chiang 1998; Bai and Cho 1996.

<sup>19</sup> Some argue that, compared to life expectancy at birth, the child or juvenile population sex ratio (for age group 0–four or under 10 respectively) is a better indicator of gender differences in health status. The higher life expectancy of women largely reflects the greater survival chances of older females that more than compensates (and therefore conceals) higher mortality among younger females (Saith and Harris-White 2000).

<sup>20</sup> Taking 106 boys per 100 girls as the benchmark (“normal”) sex ratio at birth to update Park and Cho’s (1995) estimate indicates that 5.4 per cent or 298,000 girls were missing in Korea between 1986 and 2003 (Author’s calculations based on KNSO [2003]).

urbanization, and the rising education and labour-force participation of women (Das Gupta et al. 2003). The lower value of daughters is argued to be impervious to improvements in adult women's labour-market status. An alternative explanation that pays greater attention to the economic forces at work is that the governments' reliance on the family as a source of support for the elderly until the late 1990s and the unfavourable terms of women's employment in the labour market are likely to have reinforced parental, particularly mothers', preference for having sons. Thus, the weak earning power of prospective daughters is likely to have rendered them less reliable as a means of ensuring the security of elderly parents and contributed to the high and rising population sex ratios at birth after 1985. Accordingly, boosting women's earning power in an absolute and relative sense, is a key policy goal in addressing the shortfall of girls. Moreover, the extent of the movement toward greater gender equality in earnings in the 1990s and early 2000s is likely to foreshadow future developments in the child sex ratio.

## **Economic inequalities by gender**

### **The expansion of women's employment opportunities**

In the early 1960s, most of Korea's and half of Taiwan's labour force was engaged in agriculture.<sup>21</sup> During the next three decades, employment opportunities dramatically changed. Women's participation in the labour force increased, owing to the strong demand for labour associated first with manufacturing for export and later in services, while the male labour-force participation declined (though only slightly in Korea) as men pursued more schooling and retired

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<sup>21</sup> In 1961 86 per cent of women and 75 per cent of men in Korea and 47 per cent of women and 42 per cent of men in Taiwan were employed in agricultural occupations (KNSO 2001; Chu 2002).

earlier. By 2004 women's labour-force participation rate reached 50 per cent in Korea and 48 per cent in Taiwan, and the gender gap in labour-force participation narrowed to 25 and 20 percentage points, respectively (Korean National Statistical Office [KNSO] 2006c; Directorate General of Budget, Accounting and Statistics [DGBAS] 2005a).

Young, unmarried women played a key role in the early, labour-intensive phase of export-led industrialization between the early 1960s and 1973. State policy in both countries was instrumental in mobilizing young women's labour for export manufacturing. Taiwan's government "acted as a broker in getting the factories to Taiwan and the women to the factories" (Greenhalgh 1985:272). Often recruited from rural areas and out of obligation to their families, young women provided the low-wage, unskilled labour for export manufacturing, particularly in the EPZs where women constituted about 80–85 per cent of the workers in the early to mid-1970s in both countries (Nam 1994; Arrigo 1980). These women's earnings supported the schooling of their brothers, while their own schooling was cut short (Greenhalgh 1985). In Taiwan, schools functioned as labour recruitment agents for export factories. Factory representatives sought the influence of teachers and school administrators to secure the consent of the parents of rural women aged 15–16 for work in factories, and by arranging teachers' follow-up visits, they sought to ensure workers' continuity of employment and compliance in factories (Kung 1983). Taiwan's government established the "student worker" status, an arrangement designed to ensure a stable and disciplined labour supply for factories while making possible a high school diploma for workers who pursued their education through evening classes (Cheng and Hsiung 1998). In times of labour shortage, notably in 1976, graduation in some rural junior high (secondary) schools was brought forward by several months to facilitate young women's employment in factories (Fitting 1982; Kung 1983).

Moreover, from the 1960s onward, employment policies adopted by both the state and employers contributed to the development of gender-segregated employment and lower pay for women industrial workers (Cheng and Hsiung 1998; Seguino 1997). For example, through gender-specific job advertisements and exclusion from access to training, women were in effect prevented from entering higher-paid skilled jobs. Also, EPZ administrations in both countries fixed the starting wages of women production workers at 10 to 30 per cent below that of men for comparable work (Fitting 1982; Nam 1994). Through the media Taiwan's government justified such practices by alluding to women's role in the family and as supplementary earners who did not need high wages (Greenhalgh 1985). In Korea this wage differential was in place as recently as 1987, even as legislation mandating equal pay went into effect (Nam 1994). Until the early to mid-1980s, severe restrictions on labour activism were in place with a view to achieving both labour peace and low growth in wages in export-oriented and foreign-invested factories in Korea. These restrictions limited the ability of workers, particularly women, to bargain for higher wages, which in turn, reinforced the gender wage differential (Nam 1994).<sup>22</sup>

From the late 1970s onward, the age composition of the female labour force began to change, more starkly in Taiwan than in Korea. The change came in response to the increasing opportunities for young women to pursue education, the decline in fertility that made it possible for married women to take up employment and the gradual increase in the demand for labour in the services sector. In Taiwan two government-sponsored programmes in the 1970s and 1980s, "Living Rooms as Factories" and "Mothers' Workshops," were instrumental in encouraging the employment of married women in manufacturing (Hsiung 1996). These programmes emphasized

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<sup>22</sup> In order to suppress participation in labour activism, women workers (and not men) were subject to/threatened with sexual violence. Since women predominated in unskilled jobs, in which the ability to bargain collectively is key for wage increases, this type of violence is likely to have had a disproportionate effect in preventing increases in women's average wages (Nam 1994).

women's responsibilities as mothers, wives and daughters-in-law, encouraging them to combine their family responsibilities with paid work in small workshops or at home. Many were the former "factory daughters," who were now deemed "idle women" and suitable for recruitment for paid work in their homes or in neighbourhood workshops. Taiwan's industrial structure was also conducive to the expansion of married women's labour supply. Dispersed throughout the island, factories were more accessible to workers, and the preponderance of small and medium-sized firms offered relatively flexible work schedules for married women that helped make housekeeping and employment outside the home compatible (Chu 2002), albeit at the cost of gruelling work schedules, long hours and a lack of recognition as "workers" (Hsiung 1996).

In Korea during the industrialization drive of the 1970s, women had more limited involvement in the manufacturing sector. Mainly young, unmarried women were employed in large-scale establishments, while small and medium-sized firms in both manufacturing and commerce employed married women who re-entered the labour force in their 30s. Given Korea's industrial dualism, this dichotomous pattern of employment for women is sharper than in Taiwan. Women tended to drop out of the labour force upon marriage and to re-enter after the age of 35 (Chu 2002).

These changes in labour supply and demand patterns in Korea and Taiwan are reflected in the age-labour-force participation profiles. Between the early 1960s and early 2000s, all but the youngest group of women increased their participation in the labour force. The labour-force participation rate for women aged 15–19 dropped to slightly above 10 per cent by the early 2000s. In Taiwan women's age-participation profile changed from a continuously declining pattern in 1966 to an M-shaped pattern by the early 1980s and, more recently, to an inverted-U pattern that peaked in the 25–29 age group (at 72.7 per cent) in 2002. By contrast, Korean

women's M-shaped age-participation profile is still evident, with 20–24 and 40–44 year olds registering the highest participation rates in 2003, at 61.5 per cent and 64 per cent.<sup>23</sup>

### **Women's departure from manufacturing jobs**

Both economies underwent restructuring of their manufacturing industries in the 1980s and 1990s. Under pressure to upgrade technologically and the impact of the subsequent liberalization of the trade and capital accounts, the relative importance of manufacturing employment began to decline in the late 1980s (table 2). In Taiwan between 1986 and 2002, manufacturing's share of non-agricultural employment declined from 59 per cent to 43 per cent, while in Korea this share declined from its peak level of 35 per cent in 1988 to 21 per cent in 2002.

### **Place Table 2 About Here**

Women, especially those in production, were laid off in disproportionate numbers, and they constituted a declining proportion of manufacturing employment in both economies. Compared with Korea, Taiwan's manufacturing industry provided employment for a larger proportion of women workers and relied to a greater extent on their labour (tables 3 and 4). Between 1980 and 2004, the female share of manufacturing employment declined from 50 per cent to 41 per cent in Taiwan and from 39 per cent to 35 per cent in Korea. Over this period the proportion of women workers employed in Taiwan's manufacturing sector declined from 68 per cent to 38 per cent. By contrast, only 18 per cent of Korean women were employed in this sector by 2004.

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<sup>23</sup> Chu 2002; DGBAS 2002; ILO 2005.

However, in both countries women's growing employment in the service sectors represented the counterpart of women's departure from manufacturing.<sup>24</sup> Since the early 1980s, women substantially increased their share of employment in wholesale and retail trade and in community, social, and personal services; women constituted over half of the employment in these sectors in 2004 (tables 3 and 4). In contrast to Korea, women also made major strides in business services in Taiwan, where they accounted for over half of the employment in this sector in 2004.

Judging by the employment share of the top three industries, both women's and men's employment became less concentrated between 1980 and 2004, and more so in Korea than in Taiwan (tables 3 and 4). However, indexes of industrial segregation by sex indicate that over this period segregation declined in Taiwan, while it increased in Korea. The rise in index value for Korea suggests that, discernible even at the very aggregative level of eight sectors, re-segregation of employment is under way.<sup>25</sup>

The expansion of service-sector employment was associated with a rapid increase in women's employment in clerical, service/sales and professional/technical occupations. Clerical and sales/service jobs have quickly become female occupations in both economies. In 2000 women's share of clerical and sales/service workers reached 77 per cent and 55 per cent, respectively, in Taiwan, while the corresponding figures were 51 per cent and 61 per cent in Korea (DGBAS 2002; ILO 2005). Women made greater progress in the higher-paying administrator/manager and professional/technical occupations in Taiwan compared with Korea.

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<sup>24</sup> Mining, utilities, construction, and the transport, storage, and communication sectors are negligible sources of employment for women.

<sup>25</sup> Index of segregation (or dissimilarity index) is calculated as:  $S_t = (0.5) \sum_i |m_{it} - f_{it}|$

where,  $m_{it}$  and  $f_{it}$  are the proportions of men and women in industry  $i$  at time  $t$ , respectively. According to the author's calculations based on DGBAS (1991; 2005b) and ILO (2005), the index value declined from 22.1 per cent in 1980 to 17 per cent in Taiwan, while it increased from 22.3 per cent in 1980 to 27 per cent in Korea.

In 2000 women's share among administrators/managers and professionals/technicians in Taiwan reached 14 per cent and 43 per cent, while the corresponding shares in Korea were 5 per cent and 35 per cent.<sup>26</sup>

### **Place Tables 3 and 4 About Here**

The shift out of manufacturing seems to offer women greater protection from layoffs compared with men. In the late 1990s—when Korea was hit by the Asian crisis and exports declined and Taiwan experienced industrial plant closures due to the continued capital outflow to China—men became more susceptible to open unemployment.<sup>27</sup> Official unemployment rates should be interpreted with caution, however, since they do not take into account discouraged workers who want to work but are no longer looking for employment and have dropped out of the labour force. Among women the proportion of discouraged workers tends to be considerably higher than the official unemployment rate (Bai and Cho 1996),<sup>28</sup> and it may have increased in the high unemployment era of the early 2000s (Chen 2005).

### **Gender earnings inequality in decline<sup>29</sup>**

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<sup>26</sup> In Korea these shares reached 7 per cent and 38 per cent, respectively, in 2004 (ILO 2005).

<sup>27</sup> In 2002 when the unemployment rates soared to historic highs for Taiwan, the male unemployment rate stood at 5.9 per cent compared to 4.1 per cent for females (DGBAS 2005a). In Korea the peak unemployment rate was 7.8 per cent for men and 5.7 per cent for women in 1998 (KNSO 2003).

<sup>28</sup> Bai and Cho (1996) use “hidden unemployment” when referring to the ratio of discouraged workers to the sum of the civilian labour force and discouraged workers. They indicate that in 1989 the hidden unemployment rate among junior college (a less academic type of higher education institution) graduates in Korea was three times as high as their open unemployment rate.

<sup>29</sup> The earnings statistics reported in this section are either *average monthly earnings* or *average hourly earnings* (the latter calculated by the author from monthly earnings and hours data, both of them gender differentiated). The data come from either household surveys that provide worker-level data or establishment surveys that yield disaggregated industry-level data. The extent of gender earnings inequality is measured by the ratio of women's earnings to men's earnings, here referred to as the *gender earnings ratio*. A rise (decline) in the gender earnings ratio connotes a decline (rise) in gender earnings inequality.

After decades of state and employers' policies that contributed to gender earnings inequality in Korea and Taiwan, inequality is now becoming less severe. Korea's notoriously low gender earnings ratio (that is, the ratio of female to male earnings) steadily increased after its historic low of 43 per cent in 1978. Since 1987 Korea's economy-wide gender earnings ratio has risen faster than the manufacturing ratio, owing to the greater relative gains for women in the service sectors. In the service sectors, as Korean women's relative employment opportunities increased, earnings inequality declined. However, in 2002, despite the improvement in hourly earnings, Korean women still earned only 66 per cent of what men earned overall, and in manufacturing they earned only 55 per cent of men's earnings (figure 1A) (ILO 2005).

### **Place Figure 1 (A and B) About Here**

Korea's upward trend in earnings ratios prevailed in almost all sectors until the early to mid-1990s and was accompanied by an expansion in women's relative employment opportunities. These trends seem to have been halted by the Asian financial crisis, after which the earnings ratios in several service sectors declined due to the faster growth of men's earnings relative to women's earnings. In wholesale and retail trade (figure 2A), which employs almost 40 per cent of women, the earnings ratio declined in the post-1997 period, while the female share of employment increased slightly. Similarly, in health care and education, the decline in women's relative earnings accompanied the upward trend in the female share of employment.<sup>30</sup> More dramatic was the temporary drop in the earnings ratio in finance, insurance, real estate and business services sectors (the employer of 11 per cent of women in 2004), which was

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<sup>30</sup> In 1993 the Korean industrial reporting system moved from the International Standard Industrial Classification (ISIC) Revision 2 to Revision 3, which increased the number of non-agricultural sectors from eight to twelve by disaggregating wholesale retail trade into two sectors (wholesale retail trade and repairs, hotels, and restaurants); community, social and personal services into three sectors (health care, education and other) and business services into two sectors (real estate and financial intermediation). Wholesale-retail trade data in figure 2A are expressed in terms of ISIC Rev. 2 in order to report a continuous series for the 1980–2002 period.

accompanied by a trend decline in the female share of sector employment. The earnings ratio in manufacturing also took a downward turn in 2001 (figure 1A). Developments occurring within sectors, which are also picked up by rising industrial segregation by sex over the 1980–2004 period, may explain rising earnings inequality in these sectors. Likely contributors are the crowding of women into low-wage occupations, changes in the wage structure that favour male-dominated occupations, women's entry into less equitable traditionally male occupations or increased gender wage discrimination in the post-crisis period.

### **Place Figure 2 (A and B) About Here**

In Taiwan, where gender earnings inequality in manufacturing is lower than in Korea, gender earnings ratio declined until 1992, but thereafter the continued increase in the female share of manufacturing employment was accompanied by an increase in the earnings ratio, which reached 70 per cent in 2002 (figure 1B).<sup>31</sup> The improvement in women's relative earnings may be due to disproportionate employment losses among low-waged women, which increased the average earnings of women workers who remained in manufacturing. Moreover, women's relative employment increased in the services sector, and inequality in earnings declined. These trends were sustained and more generalized in Taiwan than in Korea throughout the 1980–2002 period, though earnings ratios declined temporarily in the late 1990s in finance, insurance, real estate, and business services and in community, personal and social services.<sup>32</sup>

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<sup>31</sup> Earnings data broken down by salaried (non-production) workers and wage (production) workers for Taiwan show that the gender earnings ratio is higher among wage-workers in manufacturing (for example, 73 per cent in 2002) relative to salaried workers.

<sup>32</sup> Earnings ratios also increased in almost all major occupational groups in the 1990s in Taiwan, both where the female share of employment declined (that is, in the agricultural and production occupations) and those where women's relative employment grew (that is, clerical, professional/technical and administrative/managerial occupations). Only in service occupations, gender earnings inequality increased along with the increase in women's share of employment (Berik 2005).

In wholesale and retail trade, the second largest employer of women, women earned 84 per cent of men's hourly earnings in 2002, up from 50 per cent in 1980 (figure 2B).<sup>33</sup> Overall, wage growth in the expanding, traditionally female service sectors and the increase in women's relative earnings within these sectors are possible sources of the improvement in women's relative earnings in Taiwan over this period (Zveglic and Rodgers 2004).

### **Explaining changes in gender earnings inequality**

This section reviews the econometric evidence regarding the effect of four key factors that were at work in the 1980s and 1990s on the trend in the gender earnings ratio, namely women's increasing educational qualifications and work experience, the rising technological and capital intensity of manufacturing, state policies that regulate the labour supply and the liberalization of trade and capital flows. The evidence on the impact of each is considered separately by drawing upon studies that focus on different sub-periods during the 1980s and 1990s.

#### *Educational qualifications and work experience*

According to human capital theory, women's relative earnings are expected to rise with the reduction of gender gaps in education. Since women have broadly caught up with men in relation to basic educational indicators, the remaining inequalities in earnings are at least in part likely to be accounted for by education gaps pertaining to the types of education received (that is, the

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<sup>33</sup> The earnings ratio among non-supervisory workers is higher (at 91 per cent in 2002) compared to supervisory workers.

differences in subjects studied at school by male and female students and subsequent fields of specialization) and differences in the work experiences of women and men.

Women's position as primary caregivers in the family continues to shape differences in the work experiences of men and women in Korea and Taiwan. Women's efforts to combine family responsibilities with paid employment put them under severe time pressure and at a relative disadvantage in the labour market (Chiang 1998). When women workers leave their jobs after marriage or due to a lack of adequate help with childcare, their chances of gaining work experience and the potential for wage increases are reduced.<sup>34</sup> Upon re-entry into the labour market, these women earn lower wages than women without family responsibilities and are more vulnerable to being laid-off (Lee 2002). University-educated women regard household responsibilities as a major obstacle to the development of their careers, often leading them to relinquish pursuing a career or to renounce marriage and/or having children. Others choose part-time work (Kang and Rowley 2005) and lower their career aspirations (Chou et al. 2005). Women's caregiving responsibilities help explain the large gap between the labour-force participation rates of university-educated women and men (Kang and Rowley 2005), and the employment of less-educated women in smaller establishments and in less regular and temporary work (Cho et al. 2004).

Despite difficulties in balancing their unpaid care work and paid work, women made gains in both education and experience relative to men in both economies between 1980 and 1999. These gains are reflected in the upward trend in the earnings ratio in manufacturing, when earnings data are adjusted to take into account gender differences in education levels and work

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<sup>34</sup> Taiwan's Labour Standards Law and Korea's Equal Employment Law require employers to provide (eight weeks) maternity leave with job guarantees. However, these policies are inadequate to address women's care burden. Moreover, in Korea compliance with this provision has been weak (Bai and Cho 1996).

experience (Berik et al. 2004).<sup>35</sup> However, during this period the gender earnings differential that could not be explained by women's education or work-experience-related qualifications also increased. In other words, part of this wage gain was eroded by what is presumed to be discrimination against women.<sup>36</sup> As a result, the earnings ratio rose more slowly than would have been the case had there been no increase in discrimination.

Rising discrimination had similar adverse effects on the earnings ratio in Korea between 1983 and 1992 (Rodgers 1998). In Taiwan between 1978 and 1992, discrimination more than offset women's potential earnings gains due to the rise in their relative qualifications and resulted in a decline in the earnings ratio (Zveglic et al. 1997). Additional evidence for the prevalence of discrimination in Taiwan during the 1978–2000 period is provided by Zveglic and Rodgers (2004), who show that most of the overall wage discrepancy between men and women was due to pay differentials within similar occupations, rather than gender wage differences across occupations.

### *Rising technological/capital intensity*

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<sup>35</sup> The adjustment for productivity differences between men and women workers in Korea takes into account part-time work status, education level attained, potential experience and establishment-specific job tenure, but not gender differences in occupation (which reflect the effects of socialization, tracking in different subjects in schools and discrimination). In Taiwan the adjustment also takes into account the field of study. The data used to generate the adjusted wage ratios come from Korea's Occupational Wage Survey of the Ministry of Labour, an establishment-level survey of labour-market characteristics of workers, and from the annual household surveys (Manpower Utilization Survey) of DGBAS (Berik et al. 2004).

<sup>36</sup> While the methodology for distinguishing between the sources of wage differentials is standard and widely used, its interpretation is contentious. Some labour economists view with scepticism the claims of wage discrimination against women. Their main objection is that this methodology is invariably flawed because available data sets do not permit measurement of some worker characteristics that are relevant for worker productivity, such as motivation, abilities and habits, which they argue results in overstatement of discrimination. The counterargument is that women workers are not always the ones who are deficient in these unmeasured skills (Blau et al. 2002). Furthermore, socialization leads women to obtain different education (that is, they become less qualified compared with men). Thus, some of the productivity differences that lead to lower pay for women are the product of socialization prior to entering the workforce, which leads to the underestimation of discrimination.

In both economies rising capital intensity and labour productivity in the post-1980 period had positive effects on the earnings of production workers in manufacturing. Studies that statistically isolate the effects of capital intensity on earnings found these capital-intensity effects to be of comparable magnitude for women and men, hence without impacting the gender earnings ratio (Berik 2000; Kim 2004). However, technological upgrading, measured by a shift in the composition of employment from production to non-production workers, contributed to lower gender earnings ratios among production workers. This effect was strong in Taiwan between 1984 and 1993, which coincided with major employment dislocations in manufacturing (Berik 2000), and was also evident in Korea during the 1993–1998 period (Kim 2004).

#### *State policies*

Evidence for Taiwan indicates that state policies that relaxed immigration rules dampened earnings growth for women and widened earnings inequality in key manufacturing industries in the early 1990s (Lee 2002), as well as contributing to unemployment in the late 1990s (Chen 2005). The promotion of home-based, informal work, which expanded the sectoral labor supply, also had the same effect (Berik 2000).<sup>37</sup> Government regulations that limited reliance on immigrant labour after 2000 may have lessened these effects.

#### *Trade and capital account liberalization*

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<sup>37</sup> Over the 1984–1993 period, manufacturing industries that had a relatively high share of self-employed women and women unpaid family workers had lower gender earnings ratios.

Becker's theory of discrimination (Becker 1959), as recently adapted to an open-economy context, predicts that increasing international competition has a levelling effect on earnings (Black and Brainerd 2004). Accordingly, increasing competition is expected to erode the wage premium enjoyed by male workers due to discrimination and to encourage the substitution of cheaper female labour for male workers, thereby reducing earnings inequalities. By contrast, an alternative (non-neoclassical economic) approach predicts an increase in earnings inequality as a likely outcome of employment dislocations that may be brought about by rising outward mobility of capital, import competition or technological change.<sup>38</sup> According to this approach, given employment segregation and the possibility of joblessness, workers with less bargaining power are likely to lose access to jobs. In the case of trade competition, and in a social context that favours men over women, employment losses in the labour-intensive sectors where women are concentrated may exert downward pressure on women's relative earnings through the greater loss of bargaining power of women workers vis-à-vis employers.

Most studies of the impact of greater global integration on gender earnings inequality do not isolate the effect of contemporaneous changes in the education and experience levels of individual workers, and their results are mixed. Higher exports as a share of sector output were associated with smaller earnings differentials between men and women in Taiwan between 1984 and 1993 (Berik 2000) and also in Korea between 1993 and 1998 (Kim 2004). However, in Taiwan this result was driven by the larger negative impact of export orientation on men's earnings compared with the gains in women's earnings, suggesting a downward convergence of earnings in the export sectors.

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<sup>38</sup> See, Darity (1989) and Mason and Williams (1997) for a summary of this framework. The alternative approach views discrimination as a part of competition, and not only among firms but also groups of workers. In Korea and Taiwan the state and employers, rather than male workers organized in unions, have been instrumental in pursuing discriminatory policies that expand profits and reserve higher paying, more secure jobs for male workers.

There is some evidence that increases in FDI flows had adverse effects on women's relative earnings, thus widening the wage gap. However, such results are sensitive to the way capital mobility is measured, the level of aggregation of industries and the period under consideration. Between 1981 and 1992, larger inward plus outward FDI flows were negatively associated with women's relative wages in Taiwan (Seguino 2000b). In other words, the higher these combined flows—a proxy indicator of greater globalization—the lower women's relative wages. Outward capital mobility alone also had an adverse effect on women's relative earnings, but the effect was not statistically significant (Berik 2000; Seguino 2000b). In Korea, while outward FDI was associated with an improvement in women's relative earnings between 1981 and 1992 (Seguino 2000b), it was associated with greater gender wage inequality in the 1993–1998 period that immediately followed capital account liberalization (Kim 2004).

Berik et al. (2004) provide evidence suggesting that, contrary to Becker's theory, increasing exposure to import competition has not helped reduce earnings discrimination against women. In both Taiwan and Korea, the adjusted gender earnings ratio in manufacturing was inversely related to trade shares over the 1980–1999 period. In other words, the gender earnings gap, once adjusted for increases in women's skills and work experience, deteriorated. In Taiwan the discriminatory component of the wage gap increased, as less competitive domestic industries faced rising imports. In the case of Korea, research results suggest that a decline in exports as a share of output was associated with lower discrimination. Both of these results hold to econometric tests that identify the effect of greater competition from international trade with a strategy that controls for contemporaneous changes in domestic market conditions.

Moreover, in Taiwan greater competition from imports did not translate into higher demand for relatively cheaper women workers as a substitute for more expensive male workers,

contradicting the predictions of Becker's theory. Rather, women's employment declined in both relative and absolute terms. Employers transferred production abroad to China and Southeast Asia, where they employed cheaper labour instead of women in Taiwan. Local male labour was retained in the newer, technology-intensive industries in Taiwan, and earnings discrimination increased as women's employment declined (Berik et al. 2004). These results support the alternative hypothesis that trade-induced downsizing may intensify discrimination against women workers, given women's weaker bargaining power as less-skilled workers vis-à-vis employers. Since the gender earnings ratio in Taiwan's manufacturing industry increased after 1992 (figure 1 B), we can conclude that the greater discrimination against women that was associated with import competition only partially offset their wage gains associated with increasing education and work experience.

In sum, this review indicates that a number of macroeconomic and micro-level forces shaped the rise in the gender earnings ratios in the 1980s and 1990s for Korea and Taiwan. The increase in women's relative education and work experience boosted their earnings relative to men's, even though rising discrimination weakened the upward trend in the earnings ratio. In manufacturing, technological upgrading, FDI flows and state policies intended to increase the labour supply worked against these gains. The evidence on the effect of export-orientation on sectoral gender earnings ratios is inconclusive. There is also evidence that import expansion in Taiwan was associated with rising wage discrimination against women workers in manufacturing.

### **Ongoing discrimination**

In both countries the perception that women are discriminated against at work is widely shared. In 2002 the majority of the Korean public (67 per cent) perceived there to be discrimination against women in the workplace, with a higher proportion of females (69 per cent) and university-educated people (75 per cent) reporting such awareness (KNSO 2003). A large proportion of women university students in Korea believed that conglomerates discriminated against women in hiring (Kang and Rowley 2005). In Taiwan women managers and professionals in manufacturing plants were acutely aware of discrimination, in contrast to women production workers in the same factories who were indifferent or apathetic to its existence (Chow and Hsung 2002). Chou et al. (2005) found that women managers also acknowledged the improvements in their chances of promotion and employment conditions. Given that managerial/administrative and professional/technical occupations have the lowest levels of wage inequality in Taiwan,<sup>39</sup> one may interpret the heightened awareness of discrimination on the part of women managers and professional staff as a sign of their indignation regarding the obstacles they face in the workplace, where they expect their educational qualifications to be rewarded.

These perceptions of discrimination are consistent with evidence on discriminatory employment practices in the 1990s. One reason for continued discrimination is that equal opportunity and antidiscrimination legislation is relatively new, as legal reforms to provide equal employment opportunity were only introduced in the 1980s. Korea ratified the ILO Conventions that prohibit discrimination and passed an Equal Employment Law in 1987 (which was then revised in 1989 and 2001), while Taiwan passed the Labour Standards Law in 1984 that mandated equal pay for equal work. Thus, until the late 1980s, gender-specific job

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<sup>39</sup> In 2002 when the average monthly gender earnings ratio was 74.7, the earnings ratios in the managerial/administrative, professional, and technical occupations were 81.3, 76.9, and 79.8 per cent (DGBAS 2002).

advertisements, bars on employing married women and age limits for employing women were either legal or standard practice (Bai and Cho 1996; Ku 1988). These practices served to reinforce employment segregation, crowding women in a limited set of manufacturing sectors with low pay and limited the possibility of wage increases (Seguino 1997). Though now illegal, these past practices are expected to have lasting effects on the employment patterns of the workers whose job trajectories were shaped by discrimination.

Another factor explaining discriminatory employment practices is that the enforcement of these laws in both countries has been weak. In the early 1990s, equal pay provisions were not enforced in Taiwan's export-manufacturing sector, and gender wage differentials among unskilled production workers were established at the time of hiring (Chow and Hsung 2002). Firms set lower entry-level wages for women workers, while men received a wage boost from having served in the military and also received larger wage increments on being promoted. Women managers, administrators and professionals also faced discrimination in hiring and promotion, particularly in the manufacturing sector.<sup>40</sup>

In 2001 an antidiscrimination law was introduced in Taiwan after a decade of vigorous resistance by companies and economy-related government departments on the grounds that this would undermine the export competitiveness of firms (Chen 2000). Yet, the enforcement of the law is reportedly problematic (Chou et al. 2005). In Korea a similar reluctance on the part of the state to enforce its own laws is suggested by the very low female share of employment in the higher-paying public enterprises and government offices (Bai and Cho 1996).

The persistence of discrimination in Taiwan and Korea in the 1990s and early 2000s may be explained by two theories. Some argue that *statistical discrimination* is at work and constitutes a major source of inefficiency in (competitive) Asian labour markets (Behrman and

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<sup>40</sup> Kang and Rowley 2005; Chou et al. 2005; Chow and Hsung 2002.

Zhang 1995:37). Accordingly, if employers believe that women on average have higher turnover and less continuous labour-force attachment compared with men, they are less likely to appoint women to positions of greater responsibility or to train and promote them. Thus, employers' imperfect information about individual women workers' productivity leads them to assume that on average, women have lower productivity relative to men. These assumptions result in discrimination against at least a proportion of women—those who may not fit the employers' stereotypes. According to this approach, employer discrimination will dissipate when they have more accurate information about worker productivity and adjust their perceptions of women's contribution accordingly.

An alternative conceptualization emphasizes *institutional, unconscious or unintentional discrimination* by managers against women in hiring, job placement and wages, regardless of the potential productivity of women workers. Workplaces and labour-market institutions adapt to the gender values and social norms that attach lower value to women and view them as secondary earners not deserving of equal pay, resulting in the discriminatory treatment of women workers (Albelda et al. 2001). Since discriminatory placement and wages were legal and tolerated by the state in both Taiwan and Korea during the 1960s, 1970s and 1980s, one would expect discrimination to persist for some time due to the inertia of gender values that are embedded in work policies and practices. This alternative conceptualization would supplement explanations for discrimination that emphasize the intentional nature of discrimination against women workers, practiced as the means for expanding profits or propping up the wages of male workers who also benefit from better promotional opportunities and greater job security.<sup>41</sup>

Both theories of discrimination help explain not only current employment segregation and pay differentials but also likely detrimental effects of discrimination on women's earnings in

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<sup>41</sup> Darity 1989; Mason and Williams 1997; Albelda et al. 2001.

the long run. Employers' perceptions of women workers' productivity may change slowly. In addition, current discrimination signals to women that more schooling or job experience does not bring them fair returns, thereby discouraging improvement in qualifications and thus reinforcing the lower average productivity of women.<sup>42</sup>

In sum, while gender earnings inequality is declining in Korea and Taiwan, it is accompanied by unequal employment outcomes that are the result of past discrimination shaped by state and employers' policies, continued discriminatory employment practices and the adverse effects of trade and capital liberalization. Reducing discrimination against women workers will promote fairness in the workings of the labour market and improve the social status of women. Less discrimination is also likely to enhance efficiency by increasing the skill levels of women workers.

## **Policies**

Governments in Korea and Taiwan have a strong track record of achieving their policy objectives through planned interventions in a number of difficult areas: education, population and export competitiveness. While government policies have increased the absolute levels of well-being of women and men in the areas of health and education, they have also suppressed labour rights, managed the labour supply and set wages in ways that had greater adverse effects on the earnings of women workers than on those of male workers. For decades gender inequality was embedded in workplace practices and employer and employee perceptions, and it was legal to discriminate against women workers. Hence, in spite of sustained growth, closing of

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<sup>42</sup> The recent clustering of women in lower-paying clerical and service/sales positions, where they account for an increasing proportion of employment, and their underrepresentation in the higher paying professional/administrative/managerial positions, particularly in Korea, may be explained by these theories.

educational gender gaps and strong demand for women's labour, gender earnings inequalities persisted until recently but are now slowly declining.

The legal framework favourable to gender-equitable employment, which is crucial to shaping people's perceptions and values regarding greater gender equity, is now in place. The challenge is to enforce equal employment opportunities legislation and to implement complementary policies that promote gender equity in labour markets. Greater activism is needed to goad governments into implementing their international legal obligations and domestic laws in order to promote economic equity. At the time of this writing, women's groups and the labour movement continue to be relatively weak, given their comparably short history in Korea and Taiwan. Nonetheless, in the context of democratization and a social policy trajectory that is moving toward greater inclusion (Kwon 2005; Wong 2005), there is greater room for activism for gender equity. More activism can counter the resistance of firms that profit from lower-paid women workers and of government economic ministries that fear that regulations might reduce the competitiveness of these economies' exports. Activists ought to focus attention on the social costs of continued discrimination. The limited improvement in relative earnings of women in the 1970s and 1980s is a likely contributor to the emergence of the problem of "missing girls." Daughters' lower earning power and women workers' lesser likelihood of benefiting from social protection in old age has likely reinforced son preference, as well as contributing to the economic insecurity of women in old age. It is also important to make the case that reducing workplace discrimination is profitable for firms. Fairness results in more productive workers and better quality work, which would offset the additional costs of creating more equal workplaces (Elson 1999). As a result, promoting fairness is also more consistent with Korea and Taiwan's current

economic development strategy that pursues export competitiveness by upgrading technology and relying on more skilled labour.

However, equal employment opportunity legislation will not be sufficient to address all forms of adversity faced by women workers. In particular, such legislation is unlikely to overcome employers' resistance to hiring women if they perceive women to be less productive or more costly compared with men. Thus, a two-pronged approach to address women's skills and their caring responsibilities has to complement labour-market policies. First, school systems have to encourage educational paths and career choices for girls that ensure that women's skills better match the evolving employer demands in the context of economic restructuring. Women need to qualify for a broader set of better-paying jobs, in addition to being able to take and keep the positions for which they are qualified with the help of enforcing antidiscrimination legislation.<sup>43</sup> However, as long as women workers continue to be primarily responsible for caring work in the home and institutions are not in place to socialize the costs of caring work, having more appropriate skills is unlikely to help create more equal workplaces. Employers' perceptions of the lower productivity of women's labour, in turn, are likely to persist and make discrimination against women profitable on average, possibly encouraging employers to devise ways to reduce the cost of hiring women by creating new forms of employment segregation that reinforce gender earnings inequalities. Thus, it is essential for governments to allocate more resources to help reduce the adverse effects of motherhood for women workers, by facilitating an increased availability of affordable, quality childcare centres and by moving from employer-funded to publicly funded parental leave provision.

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<sup>43</sup> In Taiwan, for example, while employment opportunities are growing in "high-tech" manufacturing industries that demand workers with engineering, technical and scientific skills, women's vocational high school training is focused on clerical and secretarial skills (Rodgers et al. 2006).

Governments also have to strengthen the systems of old-age security in order to address both the long-term costs for women of current labour-market inequalities and to weaken discrimination against future generations of girls. The longer life expectancy of women has generated a higher proportion of elderly women (Chung 2005). Compared with elderly men, these women are less educated, have fewer sources of income and are more dependent on their children for economic support. In the latter half of the 1990s and early 2000s, Korea and Taiwan have moved to institute universal social protection measures, such as unemployment insurance, health insurance, pension or social security schemes or the provision of basic economic security to their citizens (Kwon 2005). These policies are likely to help increase women's economic security and improve their well-being. They are also likely to reduce the dependence of parents, especially mothers, on their sons in old age. In order to produce more equitable conditions for old-age security, reforms will also have to address the gender inequities embedded in existing systems, wherein women are less entitled to social protection by the state due to their incorporation into the labour force as primary caregivers and their lower contributions to the public pension system during a shorter employment history (Cho et al. 2004). The combination of policies that promote gender equity in labour markets and gender-equitable access to old-age security is likely to increase women's economic security and counter the persistent social devaluation of women.

## **Conclusions**

This brief gendered history of labour markets in the Taiwan Province of China and the Republic of Korea focused on the evolution of economic inequalities between men and women during the

recent five decades of growth, demographic transition and structural change. Since the early 1960s, through planned interventions, both economies have successfully managed an export-oriented development strategy that has brought about growth in employment, real earnings and improvements in basic standards of living. This development strategy has advanced women's and men's capabilities in health and education in a relatively equitable manner, although in other respects—importantly, the population sex ratio at birth--inequalities have recently emerged. Within a relatively short time span their economies were transformed from predominantly agricultural to increasingly service economies. For much of this period, women workers served as the lower-wage workforce in manufacturing. While manufacturing has lost its importance as a source of jobs for women, a considerable proportion of women are still employed in the sector. Along with defeminization of employment in manufacturing, gender earnings inequality in this sector has declined since the 1980s in Korea and since the early 1990s in Taiwan. Earnings inequality is also declining in the growing service sectors, where relative employment opportunities for women are expanding. Taiwan, in particular, is making major progress toward gender integration of occupations and industries.

However, there are reasons to be only cautiously optimistic about the recent decline in gender earnings inequality. First, in Korea gender earnings inequality is greater compared with Taiwan (and high for a high-income economy), and at the sub-sector level, the Asian financial crisis has either interrupted or reversed its upward trend. Second, in the 1980s and 1990s, employment discrimination was prevalent in both economies and even increasing in Taiwan's manufacturing industry, as import competition caused widespread layoffs and the occupational composition shifted toward higher-skill manufacturing and service jobs for which men had more appropriate training. Rising discrimination in both countries during this period worked against

the improvements in women's earnings that would have been associated with closing gender gaps in schooling. Changes in the manufacturing base have reduced the reliance on low-wage female labour in order to achieve export competitiveness, and may render policy makers more receptive to demands for implementation of the recent equal employment opportunity laws, just as these changes have facilitated the transition to more inclusive social policies. However, greater international integration also brings pressure to maintain labour-market flexibility for businesses and to resist implementing policies intended to achieve greater gender equity. Thus, gender earnings inequality and employment segregation by sex remain pressing policy issues in Korea and Taiwan.

This overview highlights two directions for future research. One is to untangle the ways in which the restructuring of production and employment has affected gender earnings inequality (including its discriminatory component). A wage decomposition analysis would identify the source of changes in wage differentials and the relative importance of changes in employment composition and earnings both within and across the manufacturing and service sectors.<sup>44</sup> More research of this type would shed light on the sources of the rise in the earnings ratios in manufacturing and whether the trend signals greater pay equity within occupations or is only the outcome of the departure of low-wage women from the sector. Likewise, it would be useful to determine the relative contributions to the decline in gender earnings ratios in Korea after the Asian crisis of the crowding-in of women in certain sectors, rising pay inequality within occupations and other intra-sector developments. The second task is to update analyses that systematically investigate the effects of various macroeconomic policies (for example, those pertaining to trade and FDI flows) and micro- or meso-level influences (worker skills and sector

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<sup>44</sup> See, for example, Seguino (2000b) and Zveglich and Rodgers (2004).

characteristics) on gender earnings inequality, which this paper suggests have worked in opposite directions. This research would help in shaping and refining the policy agenda for pursuing growth with gender equity.

Günseli Berik is Associate Professor in the Department of Economics and the Gender Studies Program at the University of Utah in the United States. Her recent research is on international trade, gender wage inequality and working conditions in Asia, with a particular focus on Bangladesh, China, Korea and Taiwan; debates on labour standards; and gender inequalities in training for the skilled trades in the United States. She is an Associate Editor for the journal *Feminist Economics* and guest co-editor of the Gender, China, and the World Trade Organization issue of *Feminist Economics* (2007).

*Table 1* Indicators of gender well-being in the Republic of Korea and the Taiwan Province of China (various years)

| <i>Korea</i>  |                  |                  | <i>Taiwan</i>   |                  |                  |                 |
|---|------------------|------------------|-----------------|------------------|------------------|-----------------|
| <i>I. Reproductive choice</i>                               |                  |                  |                 |                  |                  |                 |
| Total fertility rate (births per woman)                     |                  |                  |                 |                  |                  |                 |
| 1970  | 4.5              |                  | 4.0             |                  |                  |                 |
| 2003  | 1.2              |                  | 1.2             |                  |                  |                 |
| <i>II. Health</i>   |                  |                  |                 |                  |                  |                 |
| Maternal mortality rate<br>(deaths per 100,000 live births) |                  |                  |                 |                  |                  |                 |
| 1983  | 15               |                  | 17              |                  |                  |                 |
| 2003  | 4                |                  | 6.6             |                  |                  |                 |
| Infant mortality rate<br>(deaths per 1,000 live births)     |                  |                  |                 |                  |                  |                 |
| 1970  | 43               |                  | 16.9            |                  |                  |                 |
| 2004  | 5                |                  | 5.3             |                  |                  |                 |
| Life expectancy at birth (years)                            |                  |                  |                 |                  |                  |                 |
|   | <u>Men</u>       | <u>Women</u>     | <u>Men</u>      | <u>Women</u>     |                  |                 |
| 1970  | 57.8             | 62.2             | 66.3            | 71.6             |                  |                 |
| 2003  | 73.9             | 80.8             | 73.4            | 79.3             |                  |                 |
| Child sex ratio (0– four year olds) <sup>a</sup>            |                  |                  |                 |                  |                  |                 |
| 1980  | 107.2            |                  | 106.9           |                  |                  |                 |
| 2003  | 109.0            |                  | 109.3           |                  |                  |                 |
| <i>III. Education</i>                                       |                  |                  |                 |                  |                  |                 |
| Years of schooling <sup>b</sup>                             |                  |                  |                 |                  |                  |                 |
|   | <u>Men</u>       | <u>Women</u>     |                 | <u>Men</u>       | <u>Women</u>     |                 |
| 1975  | 9.3              | 8.4              | 1976            | 6.7              | 4.2              |                 |
| 2000  | 13               | 13.2             | 2003            | 10.7             | 9.6              |                 |
| Female share of enrolments                                  |                  |                  |                 |                  |                  |                 |
|   | <u>Primary</u>   | <u>Secondary</u> | <u>Tertiary</u> | <u>Primary</u>   | <u>Secondary</u> | <u>Tertiary</u> |
| 1985  | 48.5             | 47.3             | 28.8            | 48.5             | 48.7             | 43.2            |
| 2003  | 47.0             | 47.0             | -               | 47.9             | 48.0             | 50.2            |
| Ratio of female–male net enrolment ratio <sup>d</sup>       |                  |                  |                 |                  |                  |                 |
|   | <u>Secondary</u> |                  |                 | <u>Secondary</u> | <u>Tertiary</u>  |                 |
| 1980  | 0.92             |                  | 1980            | 0.97             | 0.86             |                 |
| 2004  | 1.00             |                  | 2000            | 1.02             | 1.15             |                 |

*Notes:* This table reports changes in three key aspects of well-being, which have been made operational by the author on the basis of Sen's capabilities approach, namely freedom from continuous and frequent childbearing, being healthy and being educated.

a) The number of males per 100 females.

b) For Korea 20–29 age group; for Taiwan 24+ age group.

c) Female net enrolment ratio/Male net enrolment ratio. NER measures the number of age-appropriate enrolments as a share of the age-specific population.

Sources: DGBAS 1998; DGBAS 2003a DGBAS 2005a; World Bank 2005; KNSO 2000; KNSO 2001; KNSO 2003; KNSO 2006a KNSO 2006b.

Table 2 Manufacturing as a share of non-agricultural GDP and employment in the Republic of Korea and the Taiwan Province of China (1970–2002)

|                        | <i>Korea</i> |                   | <i>Taiwan</i> |                   |
|------------------------|--------------|-------------------|---------------|-------------------|
|                        | <i>GDP</i>   | <i>Employment</i> | <i>GDP</i>    | <i>Employment</i> |
| 1970                   | 25.1         | 26.6              | 41.6          | -                 |
| 1980                   | 29.1         | 32.7              | 44.2          | 56.3              |
| 1988/1986 <sup>a</sup> | 34.4         | 34.9              | 44.0          | 58.5              |
| 2002                   | 28.1         | 21.1              | 28.6          | 42.6              |

Notes: a) Peak year for manufacturing's share of employment. The peak year was 1988 for Korea and 1986 for Taiwan.

Sources: Bank of Korea 2005; ILO 2005; DGBAS 1991; DGBAS 1997; DGBAS 2003a; DGBAS 2003b; DGBAS 2005b.

Table 3 Women's non-agricultural employment by sector in the Taiwan Province of China (1980–2004)

| <i>A. Distribution of women's employment</i>      | <i>1980</i> | <i>2004</i> |
|---|-------------|-------------|
| Mining  | 0.6         | 0.0         |
| Manufacturing                                     | 67.6        | 38.3        |
| Utilities   | 0.2         | 0.2         |
| Construction                                      | 4.8         | 2.6         |
| Wholesale-retail trade                            | 13.7        | 31.2        |
| Transport, storage, communication                 | 3.7         | 3.8         |
| Business services                                 | 3.6         | 13.3        |
| Community, social, personal services              | 5.9         | 10.6        |
| Total   | 100.0       | 100.0       |
| Proportion of women employed in top three sectors | 87.2        | 82.8        |
| Proportion of men employed in top three sectors   | 78.8        | 77.0        |
| <i>B. Female share of industry employment</i>     | <i>1980</i> | <i>2004</i> |
| Mining  | 16.7        | 18.9        |
| Manufacturing                                     | 49.7        | 41.4        |
| Utilities   | 12.5        | 15.0        |
| Construction                                      | 16.0        | 17.6        |
| Wholesale-retail trade                            | 39.9        | 52.3        |
| Transport, storage, communication                 | 21.2        | 31.0        |
| Business services                                 | 35.4        | 55.5        |
| Community, social, personal services              | 48.7        | 57.8        |
| Average   | 40.8        | 44.9        |

*Sources:* DGBAS 1991; DGBAS 2005b.

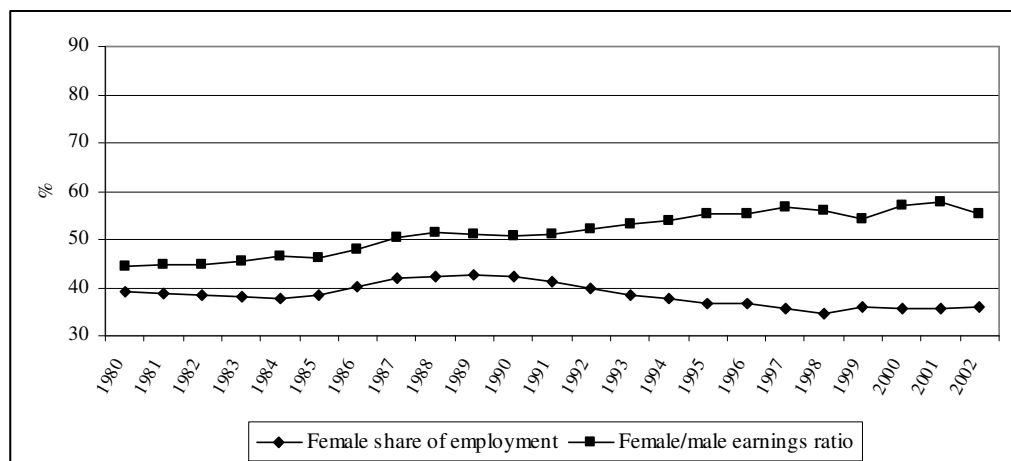
*Table 4 Women's non-agricultural employment by sector in the Republic of Korea (1980–2004)*

| <i>A. Distribution of women's employment</i>      | <i>1980</i> | <i>2004</i> |
|---|-------------|-------------|
| Mining  | 0.3         | 0.0         |
| Manufacturing                                     | 36.2        | 17.6        |
| Utilities   | 0.2         | 0.2         |
| Construction                                      | 2.3         | 1.9         |
| Wholesale-retail trade                            | 40.0        | 37.8        |
| Transport, storage, communication                 | 1.8         | 2.2         |
| Business services                                 | 3.2         | 11.3        |
| Community, social, personal services              | 16.0        | 29.0        |
| Total   | 100.0       | 100.0       |
| Proportion of women employed in top three sectors | 92.3        | 84.2        |
| Proportion of men employed in top three sectors   | 70.7        | 62.2        |
| <i>B. Female share of industry employment</i>     | <i>1980</i> | <i>2004</i> |
| Mining  | 8.9         | 6.3         |
| Manufacturing                                     | 39.1        | 34.8        |
| Utilities   | 11.4        | 18.1        |
| Construction                                      | 8.6         | 8.9         |
| Wholesale-retail trade                            | 48.6        | 54.9        |
| Transport, storage, communication                 | 9.0         | 13.3        |
| Business services                                 | 31.0        | 36.3        |
| Community, social, personal services              | 34.3        | 52.0        |
| Average   | 35.3        | 40.7        |

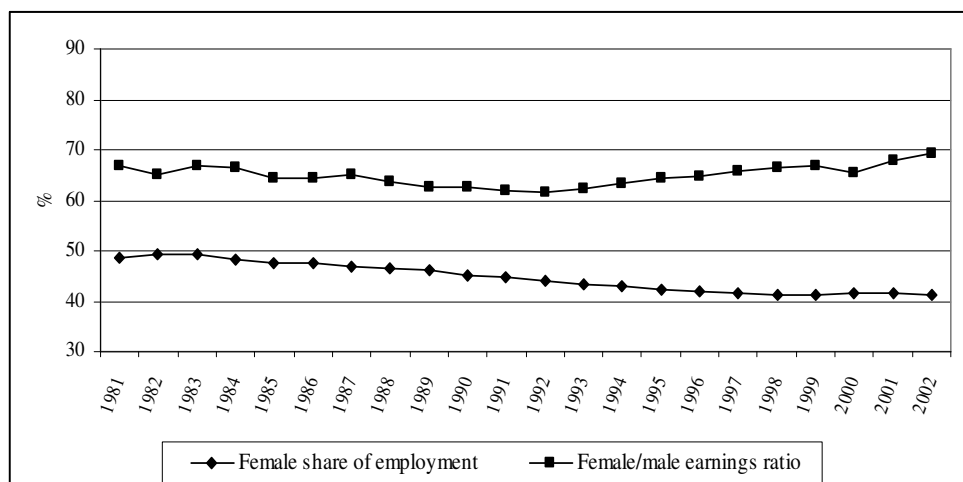
*Source:* ILO 2005.

Figure 1 Gender earnings ratio and female share of employment in manufacturing in the Republic of Korea and the Taiwan Province of China (1980–2002)

### A. Korea



### B. Taiwan

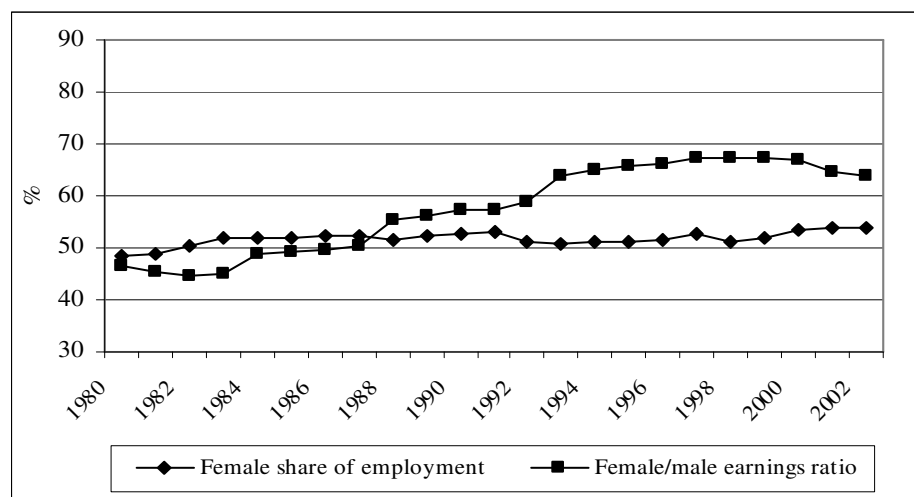


Notes: Earnings ratio refers to the ratio of average female to male hourly earnings. Hours include overtime. Employees include production and non-production workers.

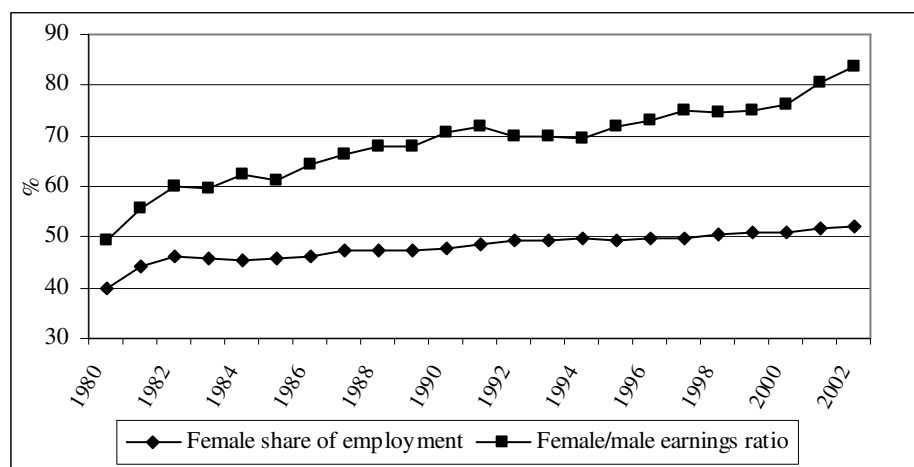
Sources: ILO 2005; DGBAS 1991; DGBAS 1997; DGBAS 2003b.

Figure 2 Gender earnings ratio and female share of employment in wholesale and retail trade in the Republic of Korea and the Taiwan Province of China (1980–2002)

### A. Korea



### B. Taiwan



Notes: Earnings ratio refers to the ratio of average female to male hourly earnings. Hours include overtime. Employees include supervisory and non-supervisory staff. Data for both Korea and Taiwan are expressed in ISIC Rev. 2.

Sources: ILO 2005; DGBAS 1991; DGBAS 1997; DGBAS 2003b.

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