

The Gender Implications of Public Sector Downsizing: The Reform Program of Vietnam *

Martín Rama

The World Bank
1818 H Street NW
Washington, DC 20433
E-mail: mrma@worldbank.org

Abstract

Men and women may be affected differently by major economic reforms and, especially, by public sector downsizing. Unfortunately the literature is not informative enough to predict the effects of a specific program. This article illustrates several analyses that could precede the launching of a sizeable downsizing operation, taking Vietnam as an example. First, the article uses employment data to assess the prospects for women to get salaried jobs. While these prospects worsened with recent reforms, they are bound to improve in the near future. Second, it estimates Mincerian equations to predict how reforms could affect the gender gap in labor earnings. Reforms are associated with a sharp decline in the gender gap, both in the state sector and out of it. Third, it analyzes the correlation between female employment and indicators of

Introduction

A comprehensive economic reform program is likely to affect men and women differently. Some of the effects may be indirect. For instance, moving from central planning to a market economy may change the labor market payoffs to education, and the educational attainment of men and women is not necessarily the same. Similarly, trade liberalization may change the composition of labor demand, hence the gender structure of employment. Other effects are much more direct, especially when the reform program includes massive public sector downsizing. The burden of job separations may not be borne evenly by male and female workers. And the welfare impact of these separations could differ by gender too.

While it is increasingly accepted that policy making has to pay special attention to social impacts, including gender impacts, the conceptual framework and the information needed to predict the gender impact of reform programs in general, and of public sector downsizing in particular, are not readily available. Gender issues have been the focus of a considerable amount

orkers. Heavy industries are favored by state-led development strategies, as a symbol of national pride and self-reliance. Capital-intensive industries are also promoted by import substitution policies, as the latter shift the allocation of resources away from a developing country's comparative advantage, namely unskilled labor. Export-oriented growth, on the other hand, relies on light, labor-intensive industries. Support for the hypothesis that economic reforms are associated with a feminization of employment is mainly provided by the East and South Asian experiences (World Bank, 2001).

Second, economic reforms could also affect the gender gap in labor earnings, although the sign of this effect is a priori ambiguous. A frequent outcome of the transition to a more market-oriented economy has been the "decompression" of labor earnings in general, and of wages in particular. This decompression results from increases in the market returns to various skills and productivity characteristics. If women have a lower level of education than men, the gender gap in labor earnings could increase. This has been observed in countries like Russia and the Ukraine (Rodgers, 1999). On the other hand, economic reforms also reduce the scope for employers to "discriminate" against women. Faced with increased competition, employers have

and Appleton, Hoddinott and Krishnan, 1999). Other studies have tried to estimate the drop in earnings subsequent to public sector downsizing, with a breakdown by gender (see Mason, 1999 and Rama, 1999). Moreover, the public sector usually offers benefits that are highly valued by women, such as maternity leave, more flexibility of working hours, and daycare facilities. These benefits are less common in the private sector. They are generally unavailable in the informal sector, where most of the separated workers end up. The loss in total compensation experience for women is thus potentially larger than the more easily measurable loss in earnings.

Finally, women are more likely than men to withdraw from the labor force after downsizing. From this perspective, the drop in earnings is even larger than suggested by the previous paragraph, as many separated women have no earnings at all after separation. However, the labor force withdrawal is sometimes voluntary. A tracer study of separated Central bank employees in Ecuador found that the earnings loss was significantly larger for women than for men. But the study also included questions on subjective wellbeing, taking into account the compensation received, the change in leisure time associated with the withdrawal from the labor force, and other adjustments in the life of the household subsequent to the job separation. The

specific aspects of the economic reform program that are gender-neutral on the surface, but could have different impacts on men and women.

The goal of this article is to illustrate some of the additional analyses that could precede the launching of economic reforms entailing public sector downsizing in a developing country or transition economy, in order to assess their gender impact. These analyses aim at predicting how trends in salaried employment by gender will be affected by the reform program, at identifying the potential changes in the gender gap in labor earnings, at evaluating job losses by gender, and at assessing whether programs to assist and compensate redundant workers affect the well-being of men and women differently. Some of these analyses rely on barely more than educated conjectures, whereas others require more rigorous quantitative work. Despite their individual weaknesses, these analyses hopefully provide a sensible overall picture of the effects of public sector downsizing.

The example chosen in the article is that of Vietnam. This country is interesting in itself. When the article was written, the Vietnamese government was about to launch a major downsizing operation, whereby up to 5,740 state-owned enterprises (SOEs) would have to be

template to assess those implications beforehand, based on the analysis of household-level and enterprise-level data. It is worth noting that the data available in the case of Vietnam are similar in nature to the data that can be found in other developing countries and transition economies. Consequently, the use of this template could be generalized, even if its results in the particular case of Vietnam should not.

The article can also be seen as an illustration of a broader trend towards the ex-ante evaluation of economic programs or policies. Most evaluations are implemented after a program or policy has been in effect for a while, using tracer surveys of the affected households or enterprises. While ex-post evaluations are potentially more accurate, they also imply that major mistakes or biases can only be corrected several years down the road, if at all. A natural complement to ex-post evaluations is therefore the ex-ante simulation, using microeconomic models, of the potential impact of the programs or policies under consideration. In this article, the assessment of the extent of labor redundancy by gender and, especially, of the effects of job separation under different assistance strategies, rests on microeconomic simulations of this sort.

partner and aid provider. The result was a collapse in economic growth and high inflation reaching at about 450 percent per year. Confronted with this situation, the government launched a massive restructuring of loss-making SOEs, leading to the separation of about one-third of the public enterprise workforce.

Elements for an assessment of the gender impact of these reforms can be found in various studies on the condition of women in Vietnam (see the overview by Long *et al.*, 2000, and the comprehensive bibliography by Pham, 2000). Those studies do not always allow to disentangle the effects of economic reforms from those of other, more permanent factors affecting gender relations. Still, they prove interesting when combined with data on employment from the 1992 and 1997-98 rounds of the Vietnam Living Standards Survey (VLSS).

One striking fact, when analyzing the VLSS data, is the slow growth of salaried employment among women, relative to men. This fact is at odds with the first proposition emerging from the literature on the gender implications of economic reforms, according to which women should face better employment prospects than men. It is worth noting that this employment pattern is not due to a decline in female participation rates, like the one observed in

A natural candidate to explain this striking trend is the massive downsizing program of the early 1990s. The total number of employees in the state sector was reduced from 3.8 million in 1985 (about 15 percent of the labor force) to 2.92 million in 1992 (or 9 percent). As a result, public sector jobs account for a larger share of wage employment among women than among men. In fact, even a gender-neutral downsizing would lead to a larger drop in wage employment (in relative terms) for women than for men. In the case of Vietnam, downsizing was not gender-neutral though, as roughly 70 percent of the separated workers were female. In 1990-91 alone some 553,000 women workers were laid off from SOEs (Beresford, 1994). This figure amounts to 19.7 percent of all female wage employment in 1992-93.

Over time, however, the first proposition emerging from the literature is likely to be confirmed in Vietnam as well. In 1998, SOEs represented 46.2 percent of industrial GDP, but they accounted for only 24.2 percent of industrial employment. On the other hand, private firms in manufacturing were clearly labor intensive and export-oriented (Belser, 2000). The economic reform program of Vietnam should lead to a gradual contraction of the former sector, and a fast expansion of the latter. Belser estimates that given Vietnam's endowment of natural and human

proportion of female workers can be found in private firms (55.6 percent), followed by enterprises with foreign investment capital (48.8 percent). The lowest proportion, 39.7 percent, is in SOEs. This ranking is observed despite a government policy that encourages SOEs to employ as many female workers as possible (ILO, 1998). If the ranking holds over time, a expansion of private firms and enterprises with foreign investment capital, in parallel with contraction of the state sector, should lead to better employment opportunities for women.

Impact on Labor Earnings

Mincerian equations, or earnings functions, are a useful tool to assess the impact of economic reforms on the gender gap in labor earnings. These functions, usually estimated using individual records from household surveys, link (the log of) labor earnings to individual characteristics such as educational attainment, work experience or region of residence. Earnings functions can be estimated separately for men and for women, in which case the gender gap in

laried workers of both sexes, obtained from the 1992-93 and 1997-98 rounds of the VLSS. Many things might have changed between these two periods. Differences in the skill composition of the labor force, in the terms of trade faced by the country, in the world interest rate, or even in weather conditions, could account for some of the change in the coefficients. But in the case of Vietnam, the effects of these genuinely exogenous differences are probably dwarfed by those of the economic reforms launched under the Doi Moi.

The earnings functions reported in Table 2 do not correct for potential self-selection biases. Women who hold salaried jobs could be different, in some systematic way, from other women. For example, they could be more talented. And the same applies to men who have salaried jobs. More talented workers are also likely to have a higher educational attainment. Earnings functions could attribute to educational attainment what is in reality due to talent, thus biasing upwards the corresponding coefficient. The coefficients on other individual characteristics could be biased as well. But if the self-selection bias is stable over time, the comparison between the coefficients obtained for 1992-93 and 1997-98 should still be informative regarding the changes elicited by economic reforms.

variables for the selection into salaried work, allowing for different effects for men and women. The results did not differ significantly from those reported in Table 2.

According to the second proposition emerging from the literature on the gender impact of economic reforms, an increase in the returns to education should be expected. In Vietnam, this increase is observable both in SOEs and in the private sector, as shown by the coefficient multiplying the education variable in Table 2. Although returns to education appear to be substantially lower than in other countries, they almost doubled over a five-year period. For instance, in the private sector the contribution of each additional year of education to earnings increased from 2.34 percent to 3.98 percent. Because women have lower levels of education than men, this “decompression” of earnings must have been at their disadvantage. However, the effect is probably small, as the difference in average levels of education between men and women is only about one year. The earnings decompression could then be associated with a decrease in the earnings gender gap of less than two percentage points.

On the other hand, the 1990s witnessed a substantial decline in the gap in earnings between men and women, as measured by the coefficient multiplying the gender dummy

duced the gender gap in earnings, and this trend can be expected to continue with the new wave of reforms that is about to be launched.

Admittedly, the comparisons in Table 2 refer to wage earners only, as data on the earnings of the self-employed are not available. Few of the women who lost their jobs in SOE are likely to have found salaried jobs, and many actually ended up doing unpaid work, as shown in Table 3. The figures in this table were constructed by Rodgers (1999), using data from the 1992-93 round of the VLSS. This survey contains detailed information on employment at the time of the survey, employment in the previous 12 months, and work performed prior to the job switch in those 12 months. Although many SOE workers lost their jobs before the survey took place, the recall questions on employment history cover at least some of the retrenchment periods. Rodgers' analysis focuses on respondents who report a change in jobs. The top panel of Table 3 refers to job switches that took place within the 12 months preceding the survey, whereas the bottom panel refers to switches prior to those 12 months.

The results in Table 3 show that during the first 12 months after a job change many more women than men withdraw from the labor force. But to a large extent, this withdrawal appears

Whatever the explanation for the labor force withdrawal, it was clearly temporary. After 12 months, the shares of men and women out of the labor force became substantially smaller and actually comparable to the shares observed for the population at large (see Table 1). Based on the experience of the early 1990s, it is thus unlikely that the downsizing operation about to be launched in Vietnam will have a lasting effect on the labor force participation rate of women.

The decline in the share out of force observed after 12 months is largely associated with an increase in unpaid work. This is actually the main activity of most of those who change jobs, regardless of whether the jobs they left were in the public sector or out of it. Table 2 also reveals a substantial increase in the share doing paid work. This share is roughly twice as large after 12 months from a job change than within the immediate 12 months. But paid work remains more prevalent among men than among women, even after 12 months, regardless of whether their previous job was in the public sector or out of it.

Impact on Job Losses

with the individual characteristics of SOE workers. Therefore, the figures reported in Table 2 are non-weighted averages across those 451 persons.

According to Table 4, female SOE workers differ from male SOE workers in two main respects. First, and not surprisingly, they earn less. The annual basic salary is more than one million dong lower for men than for women. When bonuses, allowances and payments in kind are taken into account, the gap climbs to roughly two million dong. And it widens by an extra half a million dong when extra earnings in secondary and tertiary occupations are considered as well. Given the similarity of average age, education and seniority, this gap confirms the existence of a “gender gap” in labor earnings, as had already been suggested by the regression in Table 2. The second difference between male and female SOE workers is that the former are more likely to be married.

These two differences could have opposite effects on the probability of being declared redundant. Other things equal, female workers are “cheaper”. From a purely economic perspective, it could therefore be in the interest of the SOEs to cut on male employment first. This interest could even be stronger for the now private owners, who might be more profit-

employment by gender. However, data for enterprises and individuals can be matched at the sector level. For this article, the female share of employment by sector of activity was estimated using the 451 persons whose main occupation was in an SOE, according to the sample of the 1997-98 round of the VLSS. The source of the data was thus the same as in Table 4. The female share of employment was in turn matched to sectoral indicators of labor redundancy, estimating enterprise-level data. The results are reported in Figures 1 and 2.

Figure 1 plots the female share of employment in SOEs against the fraction of workers who are potentially redundant, by sector of activity. The fraction of workers who are potentially redundant was estimated by Belser and Rama (2001), comparing employment levels across enterprises with different degrees of state ownership. The comparison by Belser and Rama controls for sector of activity, region and the age of the enterprise, among other variables. It measures the drop in employment that would occur if all SOEs in the sector were to operate as privately owned enterprises. More specifically, it predicts the employment level of each enterprise if its state share of capital were to suddenly fall to zero, and compares this prediction to the observed employment level. In practice, the number of job separations will be smaller than

ore prevalent. On the other hand, a vast majority of SOE workers in transportation, instruction, oil and gas, mining, and machinery and equipment are potentially redundant. Male employment is dominant in these sectors. Overall, Figure 1 reveals a strongly negative association between female employment and potential labor redundancy. The correlation coefficient between these two variables is -0.92 .

The nature of the labor contracts used in different sectors of activity also suggests that female workers are in higher demand than male workers. Figure 2 plots the female share of employment against the fraction of SOEs workers who are employed on short-term or temporary contracts, by sector of activity. Short-term and temporary contracts usually reveal precarious employment conditions. SOEs, or their new owners, could discontinue these contracts on a short notice, by simply not renewing them. Being employed on a short-term or temporary contract can thus be seen as an indication of being productive, from the point of view of the enterprise. It follows that most of the truly redundant workers must be employed on either long-term or open-ended contracts. Information on the fraction of workers who are on short-term or temporary contracts in each sector was drawn from the enterprise database constructed by Balcer and Pomy

This positive association has two different implications. On the one hand, it suggests that the gender gap is larger than revealed by the mere earnings comparison in the previous section. Women not only earn less than men with similar skills, they also face more economic insecurity to the extent that short-term or temporary contracts entail fewer non-wage benefits, the earnings gap probably underestimates the gap in total compensation too. On the other hand, the positive association implies that women may suffer less from public sector downsizing than men. Truly redundant workers, employed on either long-term or open-ended contracts, are more likely to be male than female.

It is important to stress that the correlations revealed by Figures 1 and 2 do not arise by construction. In estimating the fraction of SOE workers who are potentially redundant, Belski and Rama do not use information on the female share of employment (which is not available at the enterprise level) nor on the fraction of workers who are on short-term or temporary contracts. The variables in the horizontal and vertical axes of Figures 1 and 2 are, therefore, generated independently. In the case of Figure 1, they even come from different sources, as the estimates of Belski and Rama rely on an enterprise database, which reports no gender breakdown, whereas

newed at expiration do not get cash compensation, training or any other form of assistance but even “nothing” is not necessarily gender-neutral. The third proposition emerging from the literature on the gender impact of public sector downsizing is that women are more likely to experience a larger drop in earnings than men in the event of separation. Providing the same amount of support (including no support at all) to separated men and women is therefore equivalent to accepting a bigger loss in earnings for the latter. If large numbers of workers hired on short-term or temporary contracts were to be separated in Vietnam, despite their low redundancy rates, women could suffer disproportionately.

As regards workers on long-term or permanent contracts, a key component of the assistance strategy considered by the government of Vietnam is early retirement. At the time when this article was written, early retirement was regulated by decree 93/1998/ND-CP, which allows workers to get old-age pension up to five years prior to the “normal” retirement age. The normal retirement age is 60 years for males and 55 years for females. The old-age pension is reduced by one percent for each year below the normal retirement age. The reduction in retirement age allowed by decree 93/1998/ND-CP is the same for both sexes, so that on the

the questions asked by the survey is difficult. Still, some of its results are interesting on their own (for a more detailed analysis, see Rama, 2001).

Female respondents are more inclined than male respondents to claim that early retirement adversely affects the status of women. From a “social” point of view, the early retirement program could thus be detrimental to women. However, this perception is voiced by less than half of the interviewees. Only two assertions get a majority of supporters among women. One of them is that early retirement leads to a lower pension, which is so by design. The other is that early retirement benefits women more than men. From an “economic” point of view, then, the early retirement program could be favorable to women. Whether the adverse “social” implications are offset by the “economic” implications probably depends on the characteristics of each worker.

While the subjective evaluation of early retirement is unobservable, the implicit transfer of resources created by the program can be quantified. Figure 3 displays the average transfer for the SOE workers who would have been eligible for early retirement in the sample of the 1997-98 round of the VISS. Had decree 02/1998/ND-CP been in force at that time. To estimate

Computations were carried out using the Downsizing Options Simulation Exercise, or DOSE, an Excel-based application that incorporates the lessons from a broader research project on public sector downsizing (see Rama, 1999). The DOSE is a small-scale version of the public sector agencies or enterprises to be restructured, constructed using all the information available about their workers. In the case of Vietnam, this small-scale public sector is made of the 45 DOSE workers that could be found in the sample of the 1997-98 round of the VLSS. The DOSE takes into account their individual characteristics as well as the characteristics of their public sector jobs. With this information it predicts, worker by worker, the consequences of different early retirement programs. Reported figures are averages over all the DOSE workers who are eligible for early retirement.

Based on the results in Figure 3, the early retirement program introduced by decree 3/1998/ND-CP entails a net transfer of roughly 14 million dong for the average eligible male worker, and 12 million dong for the average eligible female worker. The ratio between these two figures is very close to the ratio between the average earnings of male and female SOE workers (see Table 4). From this perspective, the early retirement program of Vietnam could be

aining programs in Vietnam is well suited to the needs of female workers. While the ability c
aining programs to actually improve the skills of trainees is in general unclear, there ar
ounds to believe that the choices offered in Vietnam do not suffer from a bias against women.

The Vietnam Women's Union has vocational training centers for skills like compute
eration, English language, garment manufacture, knitting, lace-making, embroider
ndicraft, beauty treatment and domestic skills. Some of these skills may simply reflect typic
nder stereotypes; others appear to be well geared towards the needs of the labor market. Th
b training centers have often received initial funding from international agencies or from th
tional level of the Vietnam Women's Union, but they are largely self-supporting. Trainees ar
quired to pay a fee, usually ranging from 10 to 30 US dollars a month. These vocationa
aining centers could play a key role in assisting female SOE workers who are separated from
eir jobs.

Gender Biases in Separation Packages

om the literature on the gender impact of economic reforms. Compensation formulas should erefore be subject to scrutiny to assess whether they implicitly discriminate by gender.

When this article was written, separation packages in Vietnam were determined by th 195 Labor Code. At the risk of simplifying, their formula is set by article 42, at half a month c lary per year of service. As this formula was deemed insufficiently generous to handle mas yoffs, a special fund to pay for potentially more expensive separation packages was about to b tablished. The specific compensation formula to be used amounted to two months of salar r year of service, plus a training allowance of seven million dong, payable in cash. Thi rrmula resulted from protracted policy debates, involving simulations generated with th OSE. However, rather than focusing on the specific formula chosen by the government o ietnam, it is interesting to assess the gender implications of a broader set of compensatio ckages, that have been used in a variety of countries and contexts.

Most packages can be seen as a combination of three basic formulas (see the survey b ikeri, 1997). The first one is based on earnings. In this case, the amount of compensation oined by worker i is a multiple of his or her total salary in the SOE W_i .

$$S_i = BW_i Y_i \quad (6)$$

The generosity of this package hinges on parameter B, which can be measured in months of total salary per year of service. Finally, the third formula is a lump-sum payment, not taking into account any individual characteristic of the worker:

$$S_i = C \quad (7)$$

In this case, parameter C directly indicates the amount of compensation received by the worker. Parameter C could be measured in thousand dong.

Because not all SOE workers have the same earnings and the same number of years of service, the three formulas would compensate them differently. For instance, workers whose earnings are higher than the average would receive a higher separation package under the first formula than under the third one. Moreover, different workers have different outside alternatives. Those who have good job opportunities, or want to withdraw from the labor force

szbein (1994) and subsequently developed by Assaad (1999) and Chong and Rama (2001). This methodology relies on an estimation of the alternative earnings of each SOE worker, given his or her individual characteristics. In practical terms, the DOSE relies on an earnings function like the one in the last column in Table 2.

When comparing these alternative earnings with the actual earnings in the SOE, it appears that a majority of the workers would lose from separation. But there is a non-negligible group of workers who apparently could earn more (in some cases, much more) out of the public sector than in it. The fact that these workers did not voluntarily leave their SOE suggests that they attach a high value to non-cash benefits associated with their jobs, such as health coverage, entitlement to old-age pension, or low work effort. However, some of the potential earnings gains are too large to be credible, implying that they are most likely due to measurement errors. The approach developed by Chong and Rama consists of getting rid of these “unrealistic” gains. The highest predicted change in earnings, once these “unrealistic” cases have been removed, is then used by the DOSE as an indicator of the cash value of the benefits associated with public sector jobs. This cash equivalent is added to the actual earnings in the SOE to create an indicator

the corresponding figures would have been 64.9 and 74.6 percent respectively. A higher figure for female workers is consistent with the fact that some of the benefits that are available to DEs, but not necessarily elsewhere in Vietnam, are especially appreciated by women. This is obviously the case with maternity leave.

Figures 4, 5 and 6 report the “acceptance rates” of each of the three compensation formulas for different values of parameters A, B and C. The acceptance rate is the fraction of the DE workers for whom the separation package would exceed the present value of the estimated loss in earnings and benefits from job separation. The range of variation of parameters A, B, and C is such that the highest acceptance rate is close to 20 percent for all three packages. However, the average compensation per worker needed to attain the same acceptance rate is different in the three cases. Overall, the separation package that combines salary and years of service tends to be the most expensive.

From a gender perspective, the formula based on earnings, in Figure 4, displays consistently higher acceptance rates for male workers. At the other end, the formula based on lump-sum payment, in Figure 6, is more attractive to female workers, and increasingly so as

Conclusions

The results from the analysis in this article might not have a general validity, as economic conditions in other countries may differ from those in Vietnam. The contribution of the article does not lie in the results themselves, but rather in the underlying analysis. The latter can be interpreted as an ex-ante evaluation of the effects of an economic policy with potentially important gender implications. The article offers a conceptual framework and identifies the kind of information needed to carry out such an evaluation. But even if the results obtained in this article had no validity beyond the specific case of Vietnam, it is worth summarizing them to show that the proposed framework yields interesting insights.

First, it appears that the new reform program of Vietnam should not affect women disproportionately, as the massive downsizing of the early 1990s did. Employment in SOEs has been shaped by a decade of increased exposure to market competition. In sectors of activity where Vietnam has a comparative advantage, especially in light industries such as footwear and

The analysis in this article also suggests that the assistance programs that are currently in place to help redundant workers are not strongly biased against women. The net transfer cost from the current early retirement program is similar for both sexes, if measured as a multiple of labor earnings. It is higher for men when measured in value terms, but this does not necessarily mean that women are penalized. It has been claimed that early retirement is detrimental to female workers, as it prevents them from reaching high levels in the echelons of the SOEs they work for. However, according to the only survey available in this respect, this claim is not unanimously supported. While a large fraction of female respondents agree that early retirement diminishes the social status of women, an absolute majority of them says that it is economically beneficial for them. The current supply of training services is also quite well tailored towards female workers.

Whether separation packages treat women fairly depends on the compensation formula used. The simulations done for this article show that the acceptance rate for some of the standard packages could differ systematically for men and women. Separation packages based on a multiple of current earnings would be preferred by men, whereas those based on a lump sum

sources the government of Vietnam is willing to commit to cushion the social impact of the reforms, the separation of many SOE workers who are not eligible for early retirement could be voluntary too. Because the chosen compensation formula is quite generous, the number of workers willing to resign could be large enough to deal with most of the labor redundancy problem. It is still possible that among those who accept to retire early, or to take a separation offer, men benefit more than women. But voluntariness ensures that, on expectation, the wellbeing of redundant female SOE workers is not reduced.

Last but not least, the reform program of Vietnam may also affect the wellbeing of women who are not bound to lose their SOE jobs. The experience of the 1990s showed that the reform program was associated with a substantial reduction of the “unexplained” gap in earnings between men and women, both in SOEs and in the private sector. Moreover, a reduction in the size of the state sector should be associated with an expansion of employment in the private sector. Data on large establishments reveals that the highest proportion of female workers can be found in the private sector, and the lowest in SOEs. The reform program of Vietnam could thus increase the opportunities for women to become salaried workers. The combination of a small

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Table 1

Working Age Population by Economic Status

(Figures in percent)

Status	1992-93		
	Female	Male	Total
Active	83.86	87.85	85.74
Employed	80.91	84.49	82.59
Unemployed	2.95	3.37	3.15
Not Active	16.14	12.15	14.26
Attending School	2.12	3.71	2.87
Housekeeping	3.97	0.22	2.20
Other	10.06	8.21	9.19
Total	100.00	100.00	100.00

Source: Bales (2000). Working age population includes all persons aged 15 to 64.

Table 2

Determinants of Wage Earnings

Explanatory variables	Dependent variable: Log of total earnings in main occupation			
	1992-93		1997-98	
	SOEs	Private	SOEs	Private
Female (yes = 1)	-0.3399 *** (-5.222)	-0.4919 *** (-10.329)	-0.2047 *** (-4.810)	-0.3025 *** (-8.096)
Education (in years)	0.0272 *** (2.737)	0.0234 *** (2.755)	0.0363 *** (3.575)	0.0398 *** (6.031)
Work experience (in years)	0.0017 (0.146)	0.0229 *** (2.846)	0.0001 (0.387)	0.0175 *** (3.097)
Work experience squared	0.0003 (0.922)	-0.0005 *** (-3.498)	0.0001 (0.387)	-0.0005 *** (-4.976)
Married (yes = 1)	0.0938 (0.962)	-0.0955 (1.257)	0.1847 *** (3.196)	0.0990 ** (2.135)
Household head (yes = 1)	-0.0320 (-0.419)	0.0548 (0.843)	0.0474 (0.777)	-0.0043 (-0.093)

Table 3

Public Sector Retrenchment in Vietnam

(Figures in percent of workers who switch

		Activity a	
Up to 12 months after job switch		Unpaid work	Paid work
Previous job in Public sector	Female	47.5	8.8
	Male	52.8	11.3
Previous job in Other sector	Female	21.5	10.4
	Male	23.1	27.5
More than 12 months after job switch		Unpaid work	Paid work
Previous job in Public sector	Female	74.0	14.3
	Male	70.0	22.4
Previous job in Other sector	Female	71.3	18.1
	Male	63.9	27.3

Source: Adapted from Rodgers (1999).

Table 4
Employment in State-Owned Enterprises

Variable	Female	Male	All
Age (in years)	35.0	37.0	36.0
Married (in percent)	58.5	71.7	66.1
Household size (number of persons)	5.3	5.1	5.2
Education (in years)	11.0	11.2	11.1
Vocational training (in years)	0.7	0.8	0.8
Seniority in SOE (in years)	10.7	9.5	10.0
Basic salary in SOE (000 dongs per year)	7,311	8,652	8,078
Total earnings in SOE (000 dongs per year)	8,544	10,456	9,638
Total earnings in all jobs (000 dongs per year)	10,000	12,568	11,469

Figure 1

Female Employment and Labor Redundancy

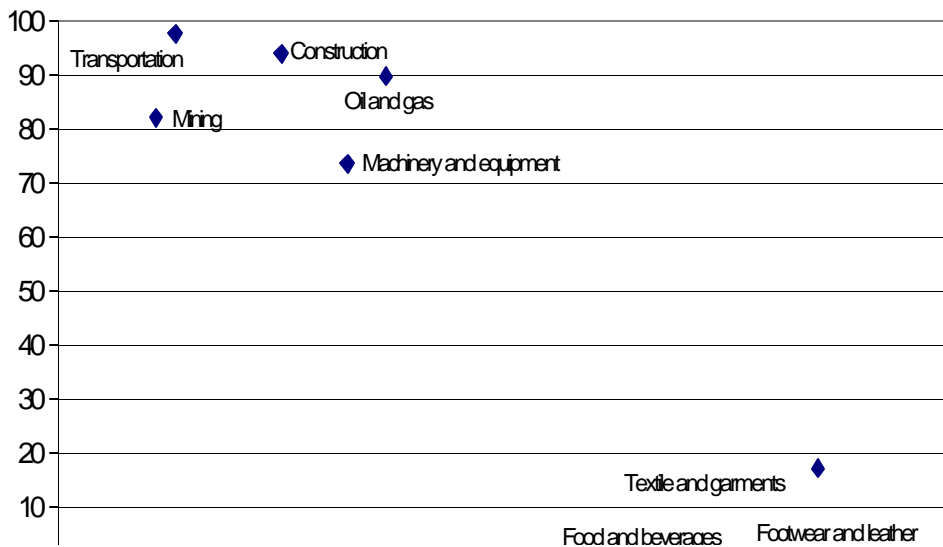


Figure 2

Female Employment and Temporary Contracts

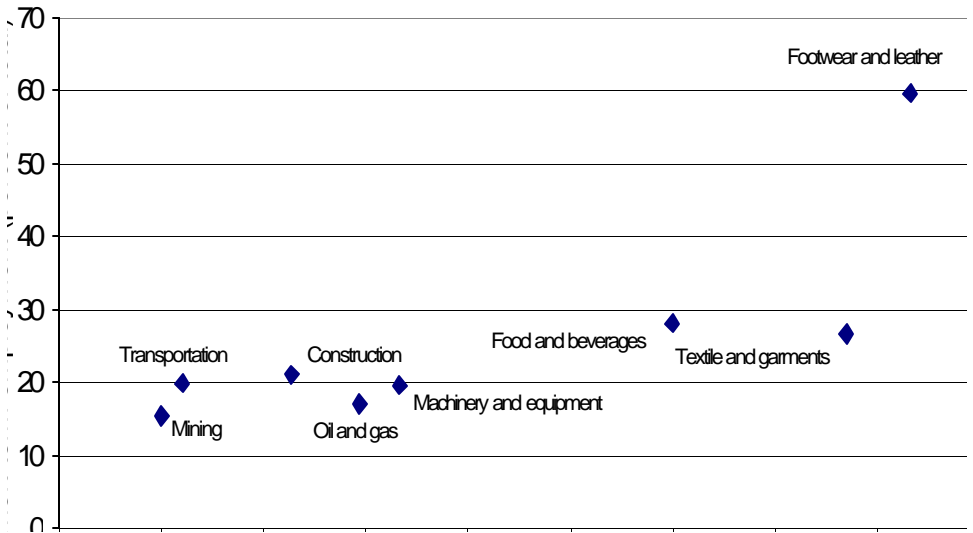
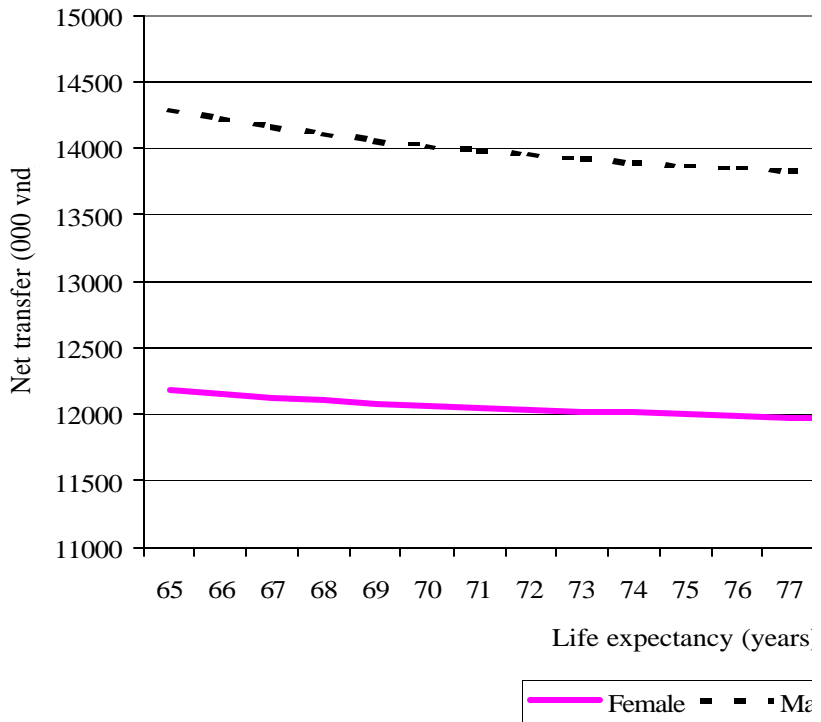


Figure 3

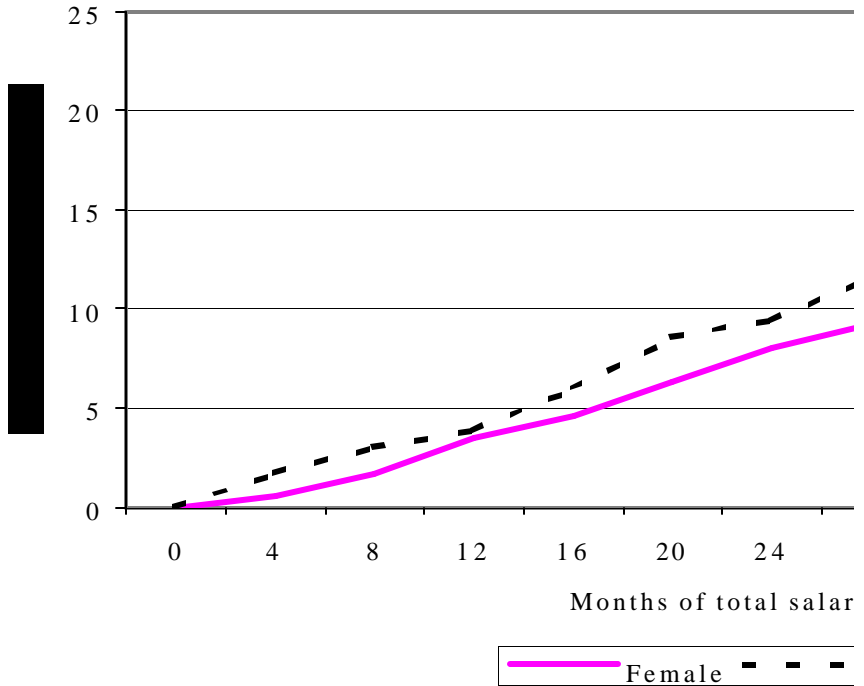
Net Transfer of Resources from Early



Source: Author's calculations using the Downsizing Options Simulation Exercise (I

Figure 4

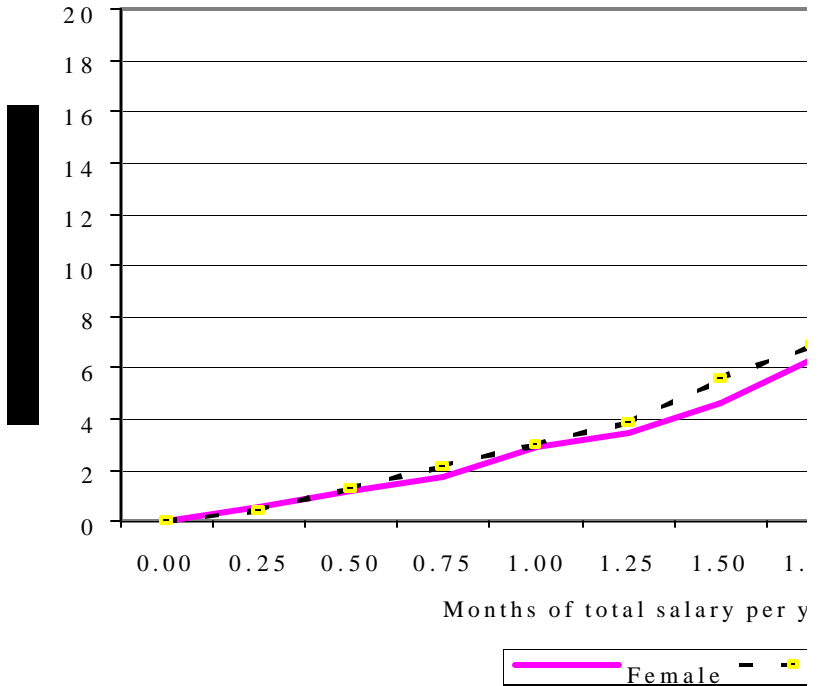
Acceptance Rate for Separation Package Ba



Source: Author's calculations using the Downsizing Options Simulation Exercise (I

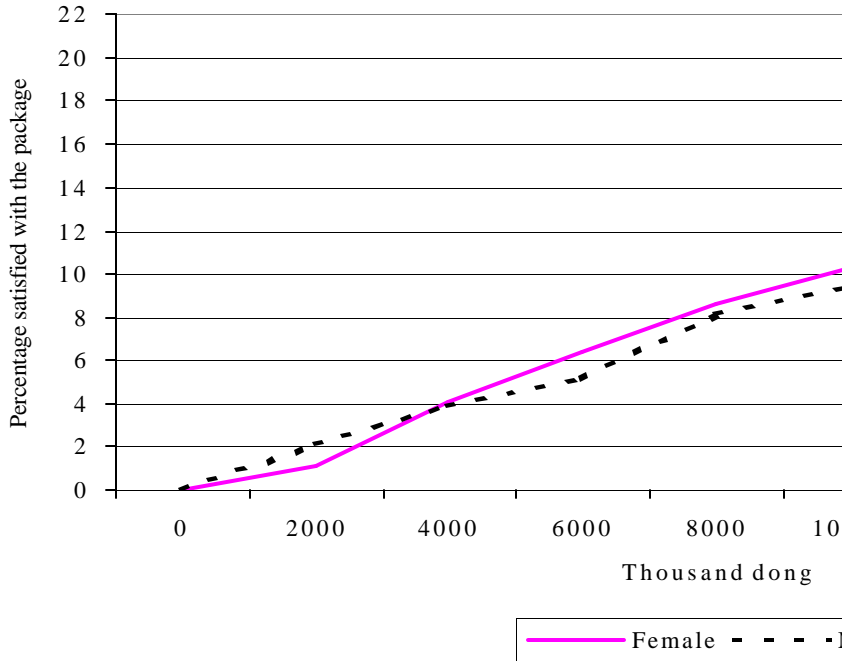
Figure 5

Acceptance Rate for Separation Package Based on



Source: Author's calculations using the Downsizing Options Simulation Ex

Acceptance Rate for a Lump-Sum Separation



Source: Author's calculations using the Downsizing Options Simulation Exercise (I)