

## 2.1. Ethnic and Gender Discriminations: Methods of Measurement and Breaking Down Data

*Axel Demenet – IRD-DIAL, Jean-Pierre Cling – University of Paris 13,  
Christophe Jalil Nordman IRD-DIAL, Mireille Razafindrakoto – IRD-DIAL,  
François Roubaud – IRD-DIAL*

The question of ethnic and gender discriminations is central to Việt Nam: are women really better treated than in other developing countries, as is often claimed? How can we explain the growing gap observed over the medium term between the Kinh majority and the other ethnic groups in terms of poverty reduction? This question is equally valid at the Southeast Asian level, and more widely in most developing countries.

The objective of this workshop is to introduce and apply methodological tools developed mainly by economists to examine these questions. Relying on a series of mainly Vietnamese household surveys (*VHLSS* - *Việt Nam Household Living Standard Survey*, *LFS* - *Labor Force Survey*), participants will be introduced to the standard methods of measuring discriminations (theoretical foundations, limits); practical exercises will follow, for teaching purposes, on paper and on computer using *Stata* software. We will then

put these into context by comparing them with results obtained on other continents, notably in Africa, so as to stimulate reflection.

### *(Retranscription)*

#### Day 1, Monday 18<sup>th</sup> July

*Presentation of the trainers and participants  
(see list of participants at end of chapter and  
biographies)*

#### **[Mireille Razafindrakoto]**

Your expectations as regards learning to use the *Stata* software prompt me to emphasize that our objective is not only to use this computer-based tool but to try to understand our approach and analyze the theme of this Summer School, based on exchanges of skills.

### [François Roubaud]

We're going to cover ethnic and gender issues from the quantitative point of view in Việt Nam, but then also move on to look more widely at other countries and regions of the world.

The theme of the 2011 Summer School is important both for the understanding of societies in general but also to implement development policies. Judging from the evidence, the issue of gender is universal; that of ethnic groups reflects the diversity of situations in different countries. We could widen our perspective to other favoured or disadvantaged groups: religious groups, social groups, age groups, etc. What we will present to you this week on gender and ethnicity can be extended to other subjects, and to very different research themes.

Economics and quantified social sciences have developed instruments for measurement (surveys) and for analysis (techniques for the breaking down of gender and ethnic gaps) which are powerful instruments to try to respond in a quantitative sense to the questions of discrimination. Our approach is quantitative and must be combined with a qualitative analysis before an in-depth diagnostic can be reached.

The training programme is divided into two main periods: firstly, a transfer of knowledge, punctuated by an exchange of views until Thursday morning; then the end of the week structured around group work. You will thus produce your own results which will be presented in the workshop but also in the collective report-back session on Saturday morning.

The days will be divided into four sub-sections: two clearly identified sessions in the morning and two further sessions in the afternoon. We will alternate knowledge transfer – concepts, results of methods – and practical exercises of introduction then of calculation with the *Stata* software.

Let's get started together on the programme for the week:

- Today we'll deal with gender statistics: why and how do we produce them? This afternoon, we'll kick off an introduction to *Stata* using a database from the Việt Nam employment survey of 2007. We'll finish the afternoon in the second session with a presentation on the issue of gender in Việt Nam;
- Tuesday. We will work on indicators for the labour market linked to the issue of gender: entry into the labour market, concepts of the labour market, unemployment, underemployment, etc. Then we'll move to an applied session which will be given over both to the programming of indicators and the discussion of results. The afternoon will be dedicated to a presentation on the state of ethnic groups in Việt Nam and in the Southeast Asian region. In the second part, we'll have a new applied session on *Stata*, looking at the quality of employment according to gender and ethnicity;
- First session of Wednesday. We will examine the techniques of breaking down data: what are the principles for this and how do we implement them?
- The two half-days of Wednesday and Thursday morning will be reserved for finishing the lecture on techniques for the breaking down of data;

- We'll move into group work on Thursday afternoon and Friday morning. You will need to set out a diagnostic of the ethnic and gender situation in one of the six provinces of Việt Nam – one province per group. The database will allow you to form this diagnostic. You will be asked to draft a document that takes a global perspective, and to analyze results on the gender situation and that of ethnic groups in a region, based on group work. The groups need to be diversified and multi-disciplinary with at least one or two people in charge of the calculations; you must have a mix of nationalities and genders;
- The presentation of the results to the entire workshop will take place on Friday afternoon;
- Finally, the last step, we will all together finalize the synthesis of the week's work, for an oral presentation by two of you next Saturday morning to all the participants and trainers of the 2011 Summer School.

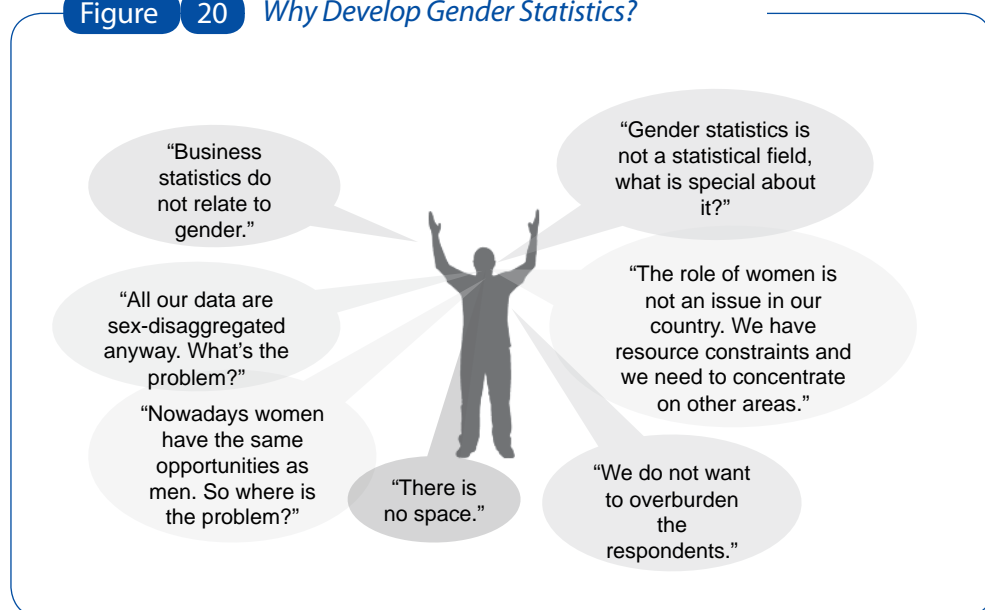
*So as to prepare the first session of work on Stata, the data from the employment survey is loaded onto each computer.*

### 2.1.1. Developing Gender Statistics

[Christophe Jalil Nordman]

We're going to continue this morning with a plea from the World Bank for the development of gender statistics.<sup>[9]</sup>

**Figure 20** *Why Develop Gender Statistics?*



Sources: United Nations Economic Commission for Europe - Statistics Division, World Bank Institute - Poverty Reduction and Economic Management Division (2007), The World Bank Group, UNECE.

[9] All the figures used here are taken from: United Nations Economic Commission for Europe - Statistics Division, World Bank Institute - Poverty Reduction and Economic Management Division, 2007, The World Bank Group, UNECE.

To the question above, we must respond that gender statistics is a field which cross-cuts all statistical domains. It's about identifying, producing, disseminating and analyzing statistics so as to understand how the issue of gender affects individuals and society.

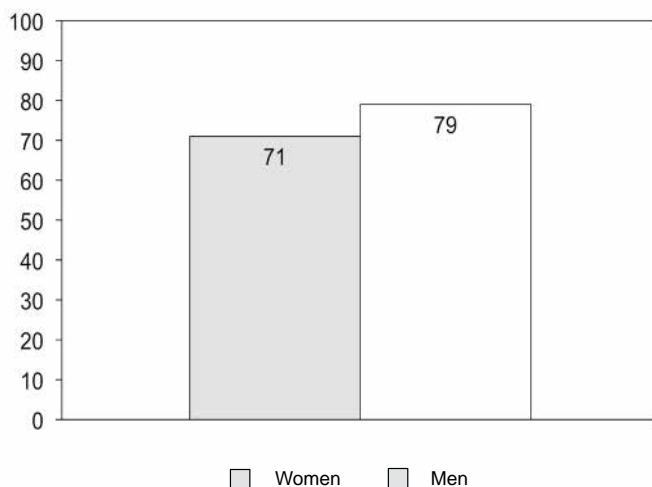
It's a way of showing how the differences between the sexes can influence the economic and social development of countries.

Sex isn't identical to the notion of gender, but the two are often confused. The category "sex" refers to the biological differences between

men and women, while the notion of *gender* is a social construct which gives men and women a particular role in society. We will use these two terms in a differentiated way, referring to these two particular notions; the difference in sex is unchanging while the difference in gender can be influenced by policy choices.

Gender statistics are not only concerned with women, but also the role of women and men in society. Let's take the example of the UK in 2005, where employment rates were plotted on the basis of an employment survey.

**Figure 21** *Understanding the Labour Market – UK Example.  
Employment Rates of Men and Women in the UK, 2005*

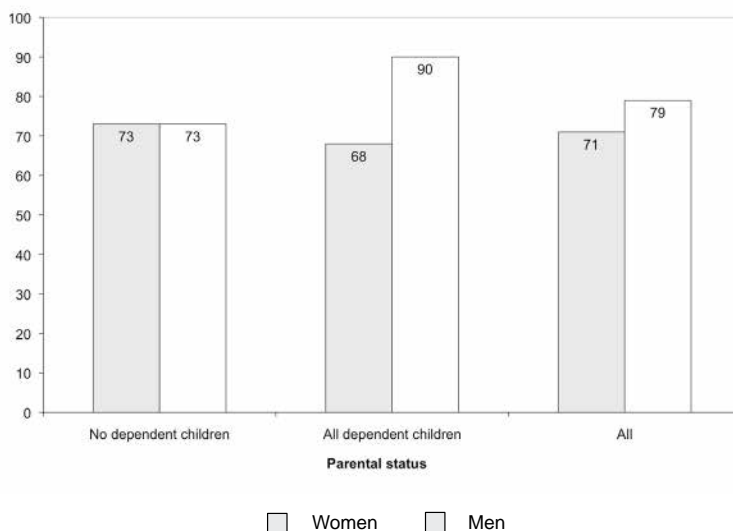


Source: Labour Force Survey, Spring 2005, Office for National Statistics, UK.

The employment rate for men is slightly higher than that for women – in statistics, we would say that the difference is not significant. The difference between the employment rates rises to about 8%, but if we examine the

carefully broken down data, introducing the "gender" dimension, *i.e.* whether individuals are responsible for children or not, the results appear very differently:

**Figure 22** *Understanding the Labour Market – UK Example.*  
*Employment Rates in the UK by Parental Status, 2005*

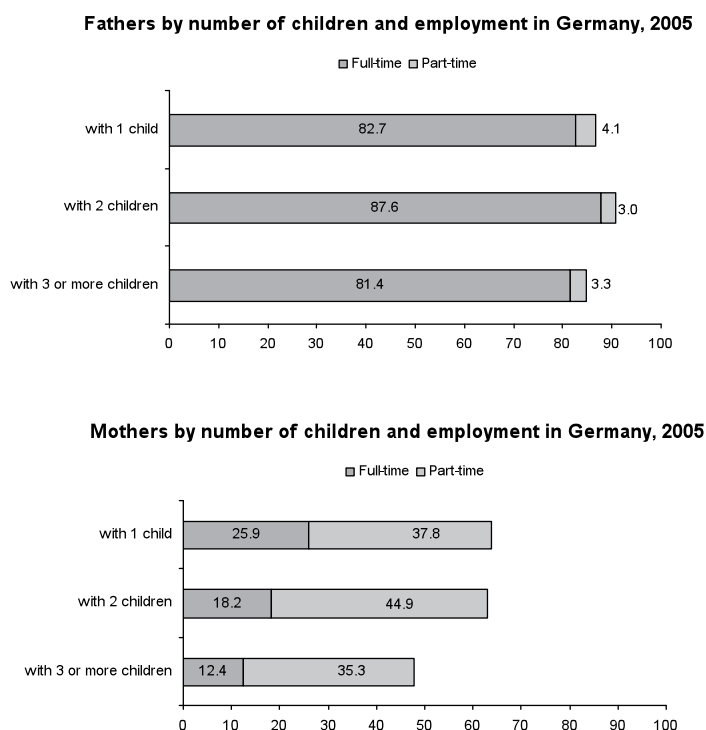


Source: Labour Force Survey, Spring 2005, Office for National Statistics, UK.

The employment rate is higher among those with children than those without. For the population group which has children, the difference in the employment rate between women and men rises to 22%. The percentage of women working falls to 68% and that of men rises to 90%.

Let's take another example which shows that even when women do participate in the workforce, their participation differs from that of men.

**Figure 23** *Understanding the Labour Market – Example of Germany*



Source: Federal Statistical Office, Germany.

For Germany in 2005, over half of salaried working women with children work part-time. This proportion is only 5% among salaried men. The proportion of men working part-time is therefore relatively independent of the number of children, whereas the proportion of women working part-time rises with the number of children they have.

The importance of sexual equality is not just a unit of labour statistics but should be included in all statistical fields. The decision-makers – policymakers – need to work with statisticians to identify the areas where social and economic realities are different for men and women. The areas of major

preoccupation for decision-makers are: poverty, education, training, health, the family and households in general, violence, armed conflict and in particular ethnic conflicts in certain countries, the economy, power, the decision-making capacity of individuals, the rights of men and women, the media, transport, sports and leisure. All these domains are affected by gender statistics.

The importance of gender statistics was recognized during the Fourth World Conference on Women held in Beijing in 1995. The programme of action which emerged from this conference became the basis for work in gender studies.

The production of statistics has implications for the development and improvement of concepts, definitions, classifications and methods.

All data which are linked to people need to be produced, broken down and disseminated according to sex, but it is important to remind ourselves that individual data are not only

collected in the social and economic domains; they are also collected in businesses which must also observe the gender dimension. This means that gender statistics are as relevant in demographic and social statistics as in other domains like business, agriculture, transport, new technologies, etc.

**Figure 24** *The Importance of Gender Statistics*



*Sources: United Nations Economic Commission for Europe – Statistics Division; World Bank Institute – Poverty Reduction and Economic Management Division (2007), The World Bank Group, UNECE.*

Numerous hypotheses are made in traditional analyses, according to which the gender dimension is not the most relevant: there are other social dynamics which are more important to analyze; the evolution of women in society is often aligned on that of the husband, so analyzing the situation of men would allow us also to obtain an image of the dynamic of women in society.

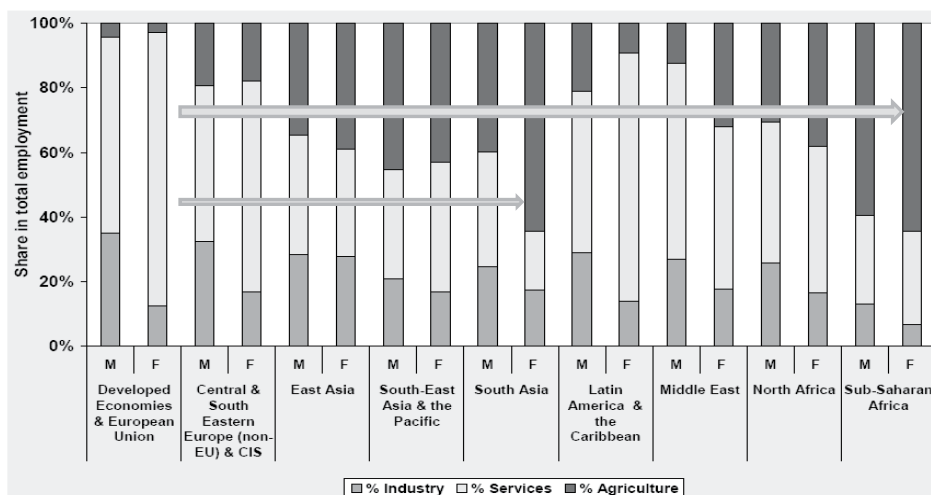
It's important to state that the objective is to provide information to support development policies and research, and to shed light on the public debate in the media and other channels of communication. Gender statistics are an essential basis for the surveillance and evaluation of the effectiveness of public policies; they are part of the institutional mechanisms necessary for the development

of a policy of sexual equality. It is thus important to examine the gender dimension of policies even if the policy isn't obviously linked to gender. Finally, it is important to make gender visible in the evidence base which underpins the development of policies.

We will now concentrate on labour statistics linked to the gender dimension; this involves a presentation which is like a guide to good practice in collecting information.

What are labour statistics and why include gender? The main objective of labour statistics is to give a precise description of the size, the structure and the characteristics of participants in the labour market and of its evolution. This is a domain where the realities of men and women differ, and must therefore be examined. These differences can touch on different aspects: working hours, type of tasks, income, etc.

**Figure 25** *Distribution of Employment by Sector, by Sex and Region, 2008\**



\* 2008: preliminary results.

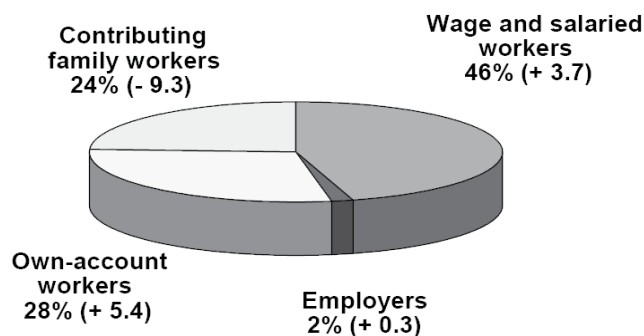
Sources: ILO, Trends Econometric Models, January 2009.

The histograms indicate the distribution of jobs in 2008 according to employment sector, sex and region for different groups of countries. It shows industrial employment as a proportion of total employment, and the gap between men and women. This gap is seen in all regions but differs significantly

by continent: from 0.5% in East Asia to over 20% in the other industrialized countries, in particular those of the European Union. For example in Sub-Saharan Africa and in South Asia, the primary sector represents over 60% of female employment.



**Figure 26** *Distribution of Women by Employment Status, 2007*



*\* In brackets: evolution since 1997.*

*Sources: ILO, Trends Econometric Models, January 2009.*

This diagram shows the distribution of women by employment status in 2007, for a large sample of countries. We have here not an image of distribution at a given moment but percentage points which represent changes, *i.e.* an evolution over a period of ten years, from 1997 to 2007. Among women, salaried work accounts for the largest share, followed by own-account or independent work which has seen a sharp rise, while family-based work has fallen significantly. This data comes from the International Labour Organization (ILO) based on a sample of about 100 countries.

The same source claims that women represent only 7% of the Board members of global companies. In the countries of Southern and Eastern Europe, women only represent 7% of corporate executives. In 2005, in the countries of Central and Eastern Europe and the CIS countries – Eastern countries – women represented 32% of workers in the industrial sector.

When labour statistics make a clear distinction between the realities of employment for men and women, users can understand and analyze the position and the constraints; and it is only when these differences are measured statistically that it is possible to define them correctly.

Let's concentrate on two essential factors, coverage and gender roles:

- Coverage shows what labour statistics are really measuring. The first point to emphasize is that the contribution of women to the economy, in general, is often poorly recorded and misrepresented. Labour statistics allow us in general to identify and characterize the fundamental situations of work and unemployment, focusing only on those workers with a regular full-time job in a business in the formal economy. In this case, it's important to realize that an essential part of the information on women's work is lost: women usually have jobs which are atypical of those we are measuring – full-time,

structured work in the formal economy. So it's indispensable to have a good understanding of women's work and society's perception of it, to produce labour statistics which are complete and relevant;

- Gender roles have an important impact on the participation of men and women in the labour market, and its measurement. We all know the roles commonly assigned to women, as housekeeper and economically dependent member of the household, or that of the man who is often seen as the breadwinner and decision-maker within the household. However, these traditional roles assigned to women often prevent them from having a professional activity. In certain cases, women cannot work without the permission of their husband – or of other men in the family – and these barriers can be imposed by the social and educational context. A survey conducted in Azerbaijan on the attitudes of men and women to work shows that if you ask women, 36% of them say that the woman should not work if the man earns enough. Even if one asks the woman about her role in society, she will have a tendency to integrate the social role which is assigned to her by men in that society.

What are the stages of the integration of the gender dimension in labour statistics?

- Firstly, one must determine the subjects to be covered. We focus on the questions to ask so as to describe as equally as possible the economic activities of men and women. This helps to explain the differences and similarities in the labour market;

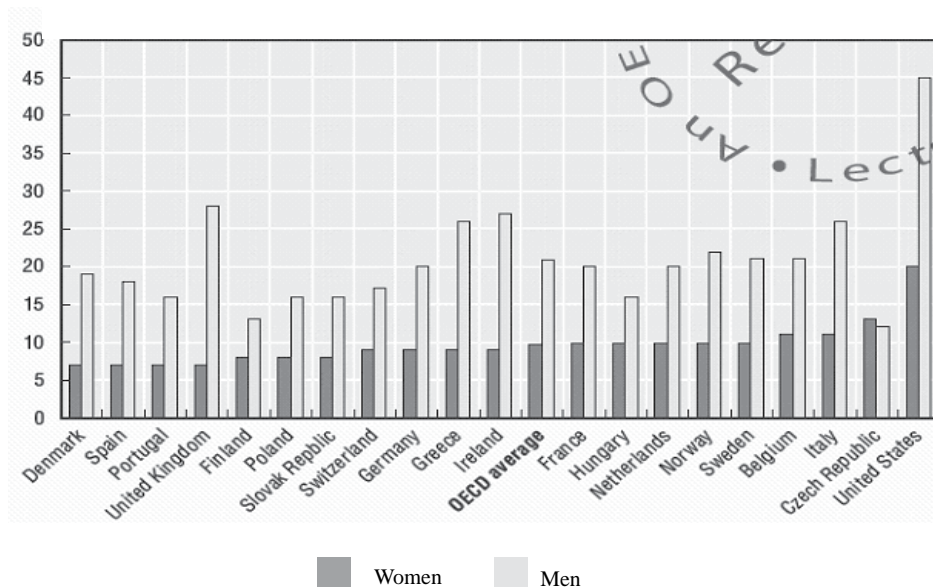
- In the second stage, it's important to define the variables and their classifications. All these variables must reflect the different situations between the sexes;
- We must look closely at the methodology of measurement. The objective is to assure oneself that all work situations are identified in a clear and coherent way during collection but also during treatment of the information;
- Finally, the fourth and last step, we explore the best ways to present and disseminate the results, so that the differences and similarities, as well as their causes, are demonstrated.

Stage 1, which defines the theme of the analysis, is a fundamental stage for the collection and analysis of data disaggregated by gender. All the conventional subjects of labour statistics are relevant for the reflection of gender distinctions. Obviously, we must focus our attention on the subjects where the disparities are more marked, like informal employment: income gaps, employment segregation, entrepreneurship, casual labour, the workplace, work/life balance.

How can we best address these subjects? In order to describe the different contributions of men and women, labour statistics need to identify and cover separately work done in parallel to domestic tasks, as is often the case with agricultural activities, for example. All subsistence activities, informal, domestic, intermittent, as well as unpaid services, need to be identified separately.

Let's look at employment segregation, a subject which is frequently dealt with in labour economics.

**Figure 27** *Number of Occupations that Account for Half of Total Employment, 2004 or Latest Year Available*



Source: OECD, *Babies and Bosses – Reconciling Work and Family Life*, 2007.

Each bar indicates the number of occupations where women represent half of the total workforce in that occupation in 2004. In most OECD countries, the female workforce is concentrated in a relatively limited number of occupations. On average, half of the female workforce is concentrated in about 10 occupations, as compared to about 20 for men – with the exception of the Czech Republic. It is also important to know in which specific occupations men and women are concentrated; if the activities dominated by women require lower qualifications, are worse paid, of a lower social status than the

jobs done by men, or if the social status of the activities depends on the sex of the workers.

Let's look now at the case of the thirty principal occupations in Sweden in 2005 (Figure 32). These occupations are represented vertically, with to the left, horizontally, the percentage of women in each of them, and to the right, the corresponding percentage of men. The length of the bars indicates if the occupation is dominated by men or by women. What conclusion can we draw?

**Figure 28** *The 30 Principal Occupations in Sweden 2005  
(Ranked by Numbers in Occupation)*

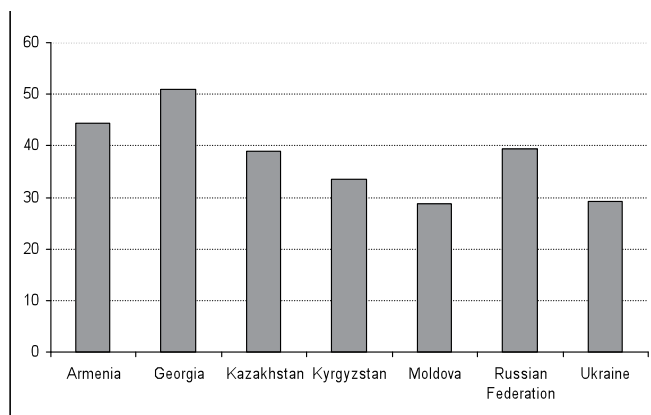


Source: Statistics Sweden, *Women and Men in Sweden, 2006*.

In this case, the occupations are completely dominated either by women or by men: less than 1% of women work as mechanics; 97% of secretarial work is done by women.

Let's take the example of income. Do women earn on average as much as men? Is equal pay for equal work a reality?

**Figure 29** *Gender Pay Gap 2004 or 2005*

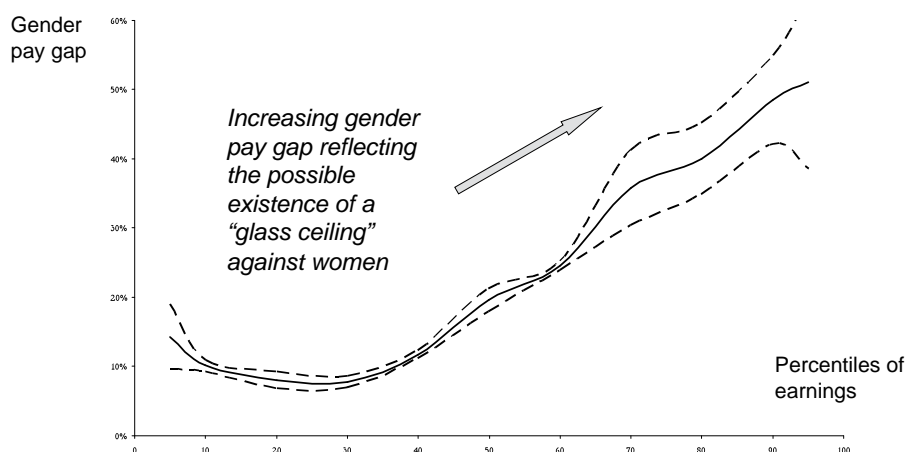


Source: UNECE Gender Statistics.

In the countries cited here, men earn on average 30% more than women. The gap reaches 50% in Georgia. What is it in Việt Nam? We'll come back to that.

Another example is to look at the evolution of the pay gap along the earnings distribution. This case study concerns the Moroccan manufacturing sector.

**Figure 30** *Evolution of the Gender Pay Gap along the Earnings Distribution in the Moroccan Manufacturing Sector*



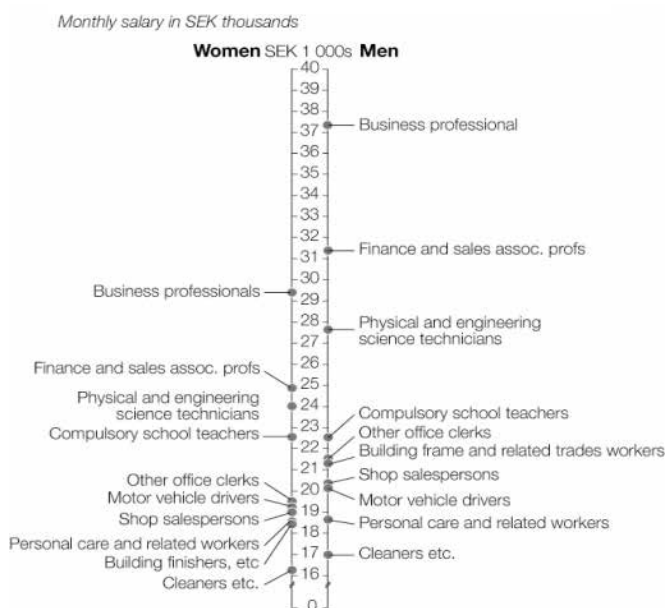
\* Confidence interval of 95%.  
Source: Nordman and Wolff (2009), based on FACS Maroc (2000),  
(<http://dx.doi.org/10.1093/jae/ejn029>).

Is the pay gap between a poor man and a poor woman at the same level of the distribution?

The pay gap between men and women increases, almost linearly, along the earnings distribution: the poorest individuals have the smallest pay gaps, the richest individuals have

significant pay gaps. We have here a brutal acceleration of the pay gap in the upper part of the wage distribution, which reflects an invisible obstacle preventing women from attaining the best-paid positions and the most sought-after posts – the “glass ceiling effect”. This effect is also illustrated in the case of Sweden.

**Figure 31** *Average Salaries in the Ten Largest Occupational Groups in 2004 in Sweden*



Source: National Mediation Office; Producer: Statistics Sweden.

The central column symbolizes the salary figures, expressed in Swedish Kroner (SEK). On each side, the wages earned by professional groups are indicated according to whether they are men or women. We can see that in eight of the ten principal employment groups, women earn on average less than men. Men and women who do jobs at the lower end of the income scale have less of an income gap; those doing jobs requiring a higher educational level have more significant salary divergence.

Another example which is often used to examine the issue of gender disparity is the work/life balance. A major constraint on the participation of women in the workforce is their family responsibilities. Marital status, very young children, or other people needing care, can be constraints on their participation in the labour market.

These examples underline the importance of reviewing the data collected on the work of men and women. To collect data like this,

we use employment surveys, which in many countries are the main source of statistical information on these issues.

For this, we must define and classify the variables.

The notion of employment must:

- Measure better the seasonal and casual jobs which women do often to a greater extent than men;
- Include people who only work a few hours and whose social role is often that of a housewife, a student or a retired person;
- Measure the production, without exchange, of produce outside trade or market. These are activities often dominated by women;
- Integrate the informal sector.

There is a current distortion relating to the income earned from a job. The concept used often only refers to direct salary, which

excludes bonuses, benefits in kind, services and other social advantages such as family allowances. These elements must also be measured by the survey to understand gender differences.

Classification is another problem. Are distortions linked to gender inherent in classification systems? For example, the standardized international classification of professions possesses fewer subdivisions for jobs dominated by women – like secretarial work – while male-dominated occupations – like craftsmanship – are more finely delineated.

In the 2001 census in Nepal, the Commission of Classifications of Professions and Sectors focused on distortions linked to gender. It then produced new codes which delivered a more detailed disaggregation by sex.

**Table 30** *Example of Classification of Activities Typically Done by Nepali Women in the NSCO, 2000*

Unit code	Description	Example
7331	Handicraft workers in wood and related materials	Maker, taparee-dunaa
7414	Fruit, vegetable and related preservers	Maker, achaar, Maker, jaand-raksee
7424	Basket weavers and related workers	Maker, doko-naamlo, Maker, sukul-gundree, Maker, guintha
7432	Weaver, knitter and related workers	Spinner, batti-kaatne

Source: CBS 2000, Nepal Standard Classification of Occupation, 2000.

This table shows the new occupations introduced with greater detail into the classification of activities: wood craftsman, canning of fruit and vegetables, etc.

Once one is sure that gender differences have been taken into account in definition and classification, the next stage is the choice of

measure to avoid all stereotypes. The measure must be independent of the perceptions of people being questioned, and of the prejudices of the interviewers. It can happen that the interviewer him/herself introduces biases into the formulation of questions.

Another example of methodology is taken from the employment survey in Pakistan – Pakistan's Labour Force Survey. A list of occupations was added, so as to take account

better of people engaged in informal work, agricultural tasks, food processing, construction work, garment workers, etc.

**Table 31** *Activity Rates in Pakistan (percentages), 2005-2006*

	Activity rate (standard questions)	Activity rate (with activity list)
<b>Total</b>	46	57
<b>Men</b>	72	72
<b>Women</b>	19	41

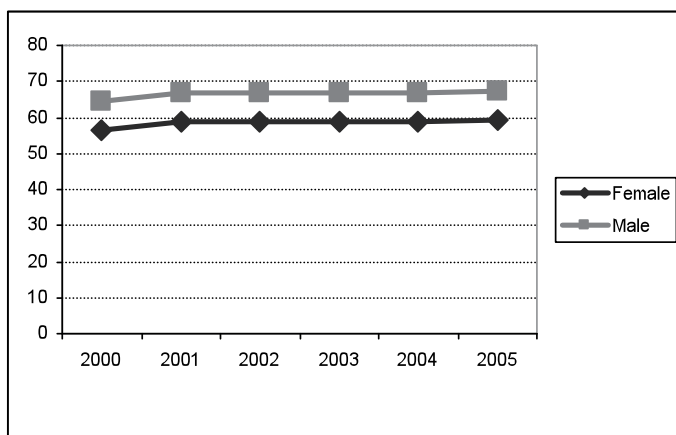
Source: Pakistan's Labour Force Survey.

This table shows the results obtained with standard questions and those obtained with the new list of activities. The activity rate of women, obtained with the new questionnaire, has more than doubled, rising from less than 20% to over 40%, while the activity rate of men remains unchanged.

Let's look finally at the fourth and final methodological step: the presentation and

dissemination of the results of the analysis. All the indicators can be calculated on the basis of a variety of break downs so as to identify the link between the professional situation of men and women. These indicators are sex, level of education, age, family context, etc. The way in which data are presented has a considerable impact on the understanding of disparities.

**Figure 32** *Economic Activity Rate of Men and Women in Sweden, 2000-2005*



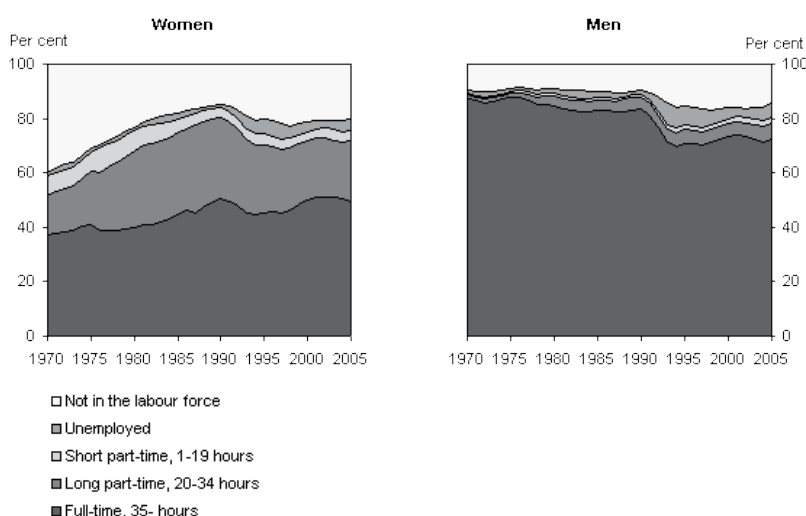
Source: UNECE Gender Statistics.



This figure shows an almost equal participation by men and women in the workforce in Sweden between 2000 and 2005. We can see trajectories of activity rates which are almost identical. The same rate can be described in detail if you distinguish

part-timers from full-timers, unemployed from inactive. However, we can see major differences in the evolution of this participation over time. Women take up a greater share of part-time employment, while men predominate in full-time work.

**Figure 33** *Women and Men Aged 20-64 by Activity Status and Hours Normally Worked, 1970-2005*



Source: Statistics Sweden.

To conclude, let's keep in mind the list of four key questions adopted during the 17<sup>th</sup> international conference of labour statisticians in Geneva in 2003, which give a guide to good practice in integration of the gender dimension into labour statistics:

- "Are the relevant subjects covered?" so as to describe problems linked to gender such as unpaid work, jobs in the unstructured economy, etc.;
- "Are all work situations correctly reflected, so as to measure work?";

- "Are the variables correctly defined then classified?";
- "Are all the statistics sufficiently detailed so as to reflect clearly the differences and the similarities between men and women in the labour market?"

This week, the examination of the national labour statistics of Việt Nam will give you the opportunity to learn, on the basis of these four questions.

*Work on Stata began at the start of the afternoon. The work was done in pairs made up of a mix of competences so as to avoid skill gaps. The objective of this first session was to familiarize the participants with the main commands of this software; the theoretical explanations were interspersed with practical application, using a representative employment survey of 165,331 individuals in Việt Nam. Practical work was done on the statistical treatment of a target population, construction of cross-tabulations, etc.*

## Selective Bibliography

- ALBRECHT, J., A. BJÖRKLUND and S. VROMAN (2003), "Is There a Glass Ceiling in Sweden?", *Journal of Labor Economics*, n° 21:145-177.
- ALTONJI, J. G. and R. M. BLANK (1999), "Race and Gender in the Labor Market", in Orley Ashenfelter and David Card, *Handbook of Labor Economics*, Volume 3C, North Holland, Amsterdam, pp. 3143-3257.
- INTERNATIONAL LABOUR ORGANIZATION (2009), *Global Employment Trends for Women*, Geneva: ILO, March.
- NORDMAN, C.J., F. RAKOTOMANANA and A.-S. ROBILLIARD (2010), "Gender Disparities in the Malagasy Labor Market", in *Gender Disparities in Africa's Labor Market*, Arbache J.S. et al. (Eds.), Chapter 3, Africa Development Forum Series, Washington, DC, The World Bank, pp. 87-154.
- NORDMAN, C.J. and F. ROUBAUD (2009), "Reassessing the Gender Wage Gap in Madagascar: Does Labor Force Attachment Really Matter?", *Economic Development and Cultural Change*, 57(4), July, pp. 785-808.
- NORDMAN, C.J. and F.-C. WOLFF (2009a), "Is there a Glass Ceiling in Morocco? Evidence from Matched Worker-Firm Data", *Journal of African Economies*, 18(4), pp. 592-633.
- NORDMAN, C.J. and F.-C. WOLFF (2009b), "Islands Through the Glass Ceiling? Evidence of Gender Wage Gaps in Madagascar and Mauritius", in *Labor Markets and Economic Development*, Ravi Kanbur and Jan Svejnar (Eds.), Chapter 25, Routledge Studies in Development Economics, Routledge.
- NORDMAN, C.J. and F.-C. WOLFF (2010), "Gender differences in Pay in African Manufacturing Firms", in *Gender Disparities in Africa's Labor Market*, Arbache J.S. et al. (Eds.), Chapter 4, Africa Development Forum Series, Washington, DC, The World Bank, pp. 155-192.
- UNITED NATIONS STATISTICS DIVISION (2008), "Mainstreaming Gender in the Production of Labour Statistics", "Incorporating Gender into Labour Statistics", Presentations.
- WORLD BANK (2001), *Engendering Development: Through Gender Equality in Rights, Resources, and Voice*, Washington, DC.

## 2.1.2. State of Play: The Situation of Women in Việt Nam

[Axel Demenet]

We're going to move on to an analysis of the situation of women in Việt Nam by examining two complementary aspects: their professional activities and their role in the home. Firstly, we will see how the rights of women and sexual equality are safeguarded in legislation – is the Vietnamese legal framework discriminatory? We will develop this reflection by examining synthetic indices on the position of women in Việt Nam in comparison to elsewhere in the world. We will then discuss the major social indicators – touching on demography, education and health – and the economic indicators, and lastly take a look at some studies on the division of tasks in the family.

Is the law a good guarantee of male/female equality in Việt Nam?

The Communist Party has considered male/female equality a key objective since the 1930s, when the Women's Union was created.

- Gender equality is written into the constitution;
- The CEDAW Convention (*Convention on the Elimination of All Forms of Discrimination Against Women*) was ratified in February 1982;
- 2006, law 73/2006/QH11 on gender equality;
- 2007, law on the control and prevention of domestic violence;
- April 2007, resolution 11-NQ/TW of the Communist Party on women's labour.

At the heart of the legal texts, the equality of women in society and in social and family

life is recognized. As well as the Women's Union, a structure which is present at all of the country's administrative levels, there is a National Committee for the progress of women, founded in 1993, which works with several Ministries.

What is your feeling about the situation in Việt Nam, from an overall point of view?

**Phạm Quang Linh**

Việt Nam's legal framework covers the promotion of gender equality relatively well, but in reality many factors of inequality still exist.

[Axel Demenet]

According to the *World Economic Forum's Global Gender Gap Index*, Việt Nam is ranked 72<sup>nd</sup> out of 134, and according to Gender Inequality Index the country is 58<sup>th</sup> out of 169.

Let's look at demographic indicators and at education and health.

From a demographic point of view, gender selection at birth is a problem: today the sex ratio is 110 boys for every 100 girls. There are strong regional disparities: in the Central Highlands, the ratio is balanced; in the Red River Delta, the imbalance rises to 115 boys for 100 girls.

*On these points, the reader is referred also to the lecture from Catherine Scornet in the plenary session.*

The educational level is linked to the fertility rate at the age of marriage. At the provincial level, there is a positive correlation between this rate and the illiteracy rate; as for the average age at first marriage, it is negatively correlated with the attainment of a degree for women. As a general trend, the gender gap in

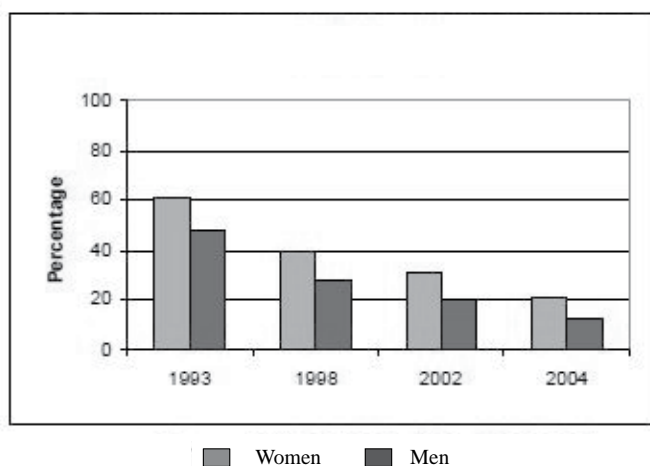
terms of illiteracy has significantly diminished over the last 20 years, dropping from 10% in 1989 to 4.4% in 2009.

When we combine two potential types of discrimination – ethnic and gender – the gaps widen: 67% of non-Kinh women are not schooled further than primary level.

A comparable diagnostic can be made in terms of access to health care since, for example, two-thirds to three-quarters of non-Kinh women give birth at home without assistance.

Let's look quickly now at relative poverty levels (defined in monetary terms) by gender – as well as issues of access to capital.

**Figure 34** *Incidence of Poverty Related to Gender of Head of Family*



Source: VHLSS, 1993, 1998, 2002 and 2004.

Initial information from the figures: for the households where the head of family is a woman, the poverty rate is slightly higher. However, let's keep in mind that female-headed households are rare and that these statistics do not reveal situations which may be very different in terms of vulnerability, which is not only a function of income: women who are widowed, divorced or abandoned by their husband, with or without children to look after. Just bear in mind that monetary poverty is a reductive measure from this point of view.

The possession of capital is key to development. It's also a source of power for women, involving them more in decision-making processes. Let's look at the situation of property ownership and access to credit:

- While land distribution is, in theory, egalitarian in Việt Nam, the vast majority – nine out of ten – of land title documents feature only the husband's name – thereby *de facto* depriving women of security against which to borrow and of negotiating power in decisions within the household;
- Households with a male head have on average more access to credit – 35%

compared to 25%. The Women's Union plays a major role in access to credit, but particularly vulnerable groups like non-Kinh women remain relatively disconnected from mass organizations.

Let's come now to women's place in the family, which is potentially the most interesting to analyze, because it's more difficult to measure. Let's base our theories on a recent study from quantitative sociology (Knodel *et al.*, 2004). The authors base their analysis on about 1,300 interviews. They aim to compare the situations of married households at three different periods: 1963-1971 (wartime), 1977-1985 (post-reunification), 1992-2000 (economic openness).

At the outset, we should ask ourselves what determines the division of tasks within a couple. A possible typology draws on three explanatory factors (Shelton and John, 1996):

- Available time. If a spouse is economically inactive or undertakes little activity, their activity level in the family sphere will be high. In Việt Nam, women are very economically active and hardly interrupt their careers (Haub and Phương Thị Thu Hương, 2004);
- Earnings. The general idea is that the person who earns more money dedicates less time to domestic tasks, the education of children, etc.
- The ideology of the family. Certain values determine the division of tasks – cf. Confucianism.

**Table 32** *Division of Tasks Over Three Periods: 1963-1971, 1977-1985, 1992-2000*

	% reporting that couple shares chore equally or husband is main person (among those reporting that husband or wife is main person doing chore) <sup>a</sup>			% reporting that husband did chore some or a lot			% reporting that wife did chore a lot		
	1963-71	1977-85	1992-00	1963-71	1977-85	1992-00	1963-71	1977-85	1992-00
Managing the household budget	17.3	23.2	32.0***	31.0	36.3	46.3***	68.3	69.9	66.9
Buying food	4.8	5.9	6.8	26.2	25.2	29.4	76.4	78.0	77.1
Cooking	7.8	7.4	7.7	33.6	30.6	36.8	84.5	83.8	82.4
Washing dishes	4.1	6.8	3.6	26.2	26.4	29.9	89.1	89.1	88.7
Cleaning house	13.0	12.5	14.4	39.4	37.3	44.4	82.4	82.9	84.3
Doing laundry	9.5	10.1	8.3	34.0	31.7	37.7	86.1	88.7	88.7
Any of the above chores	25.1	29.9	38.7***	52.3	53.7	66.4***	91.9	94.0	94.9
Any of the above chores excluding budget management	16.2	15.0	19.8	44.2	42.4	51.9*	91.4	91.9	93.1

Significance levels: \*  $p \leq 0.05$  \*\*  $p \leq 0.01$  \*\*\*  $p \leq 0.001$ .  
Source: Shelton and John, 1996.

Several conclusions can be drawn from this study, of which the first part focuses on perceptions of the division of tasks.

Looking at all three periods, unsurprisingly women are overall more involved than

men in domestic tasks in Vietnam. In terms of tiresome duties which contribute to the functioning of the house (cooking, cleaning, washing), only one respondent in ten (at the most) indicated male involvement which was equal or more to that of women. The

imbalance in domestic contribution is flagrant, because almost all women participate in at least one task, compared to only one man out of two. The management of the budget is the activity in which men are most often present: 32% of respondents considered that the man was at least as involved as the woman. This area can be seen as a source of power within the couple just as much as a time-consuming task, so the greater involvement of men isn't necessarily a positive signal for women.

The comparison of the three cohorts of households gives us some indications of the evolution of the division. The involvement of women is remarkably constant, while that of men has risen significantly as regards budget management... and much less so for the other tasks – about three points on average. One can thus detect a trend towards a slight balancing-out, keeping in mind that these figures date from 2004 and don't tell us about the last decade.

**Table 33** *Division of Tasks Over Three Periods: 1963-1971, 1977-1985, 1992-2000. Decision-making by Gender*

During the first few years of marriage, who made decisions about:	Gender of respondent		Marriage cohort		
	Male	Female	1963-71	1977-85	1992-00
<b>Household production</b>					
mainly husband	43.4	30.2	28.6	35.5	45.7
mainly wife	17.8	26.3	32.7	22.0	12.1
husband and wife equally	29.4	32.0	28.1	31.5	32.4
someone other than couple	9.5	11.4	10.6	11.0	9.8
statistical significance	***		***		
<b>Expensive purchases</b>					
mainly husband	45.7	36.6	32.8	42.0	48.4
mainly wife	10.8	13.9	22.1	9.9	5.4
husband and wife equally	36.9	41.8	37.6	41.3	39.0
someone other than couple	6.6	7.8	7.5	6.8	7.2
statistical significance	**		***		
<b>Family and kin relations</b>					
mainly husband	32.9	18.1	22.5	26.5	27.3
mainly wife	10.9	20.1	19.5	17.2	9.7
husband and wife equally	48.5	52.9	50.3	47.9	53.9
someone other than couple	7.8	9.0	7.7	8.4	9.0
statistical significance	***		**		
<b>Social life as a couple</b>					
mainly husband	25.9	15.5	19.0	21.7	21.3
mainly wife	10.9	18.5	19.4	13.1	11.6
husband and wife equally	61.2	64.4	59.7	63.1	65.7
someone other than couple	2.0	1.6	1.9	2.1	1.4
statistical significance	***		*		

Significance levels: \*  $p \leq 0.05$  \*\*  $p \leq 0.01$  \*\*\*  $p \leq 0.001$

Source: Shelton and John, 1996.

The second aspect of the study looks at decision-making during the first years of marriage, on the basis of reported perceptions. Claims vary greatly as to whom carries most weight in decisions, depending on whether your respondent is the man or the woman. Nevertheless, it does appear that

decisions are taken in a more equal way when they concern social relations, whereas both sexes say that the husband is more involved in decisions on long-term expenditure and domestic production; these decisions can be quantitatively high, given the number of individual enterprises. Contrary to the

tendency towards balancing-out seen in household tasks, it seems that the woman's role in all types of decisions is significantly less important within more recently formed couples, while that of men is rising.

Overall, what emerges is that in the domestic environment, women are more involved than men in tasks, while they carry less weight in decision-making. The first gap seems to be getting slightly smaller, while the second is widening for more recent couples. These results are intuitive, but until now seldom backed up with figures, and would benefit from being completed by "timetable"-type surveys on the actual time spent on activities, and by a closer analysis by sub-group (regions, rural/urban, education, etc.).

In the end, Việt Nam shows us a situation of contrasts, in terms of the situation of the female population. The legal framework is solid, because equality between the sexes has been an objective for a long time. Results in terms of demography, education and health are broadly encouraging. The position of the Vietnamese woman isn't institutionally inferior, nor does she suffer systematic discrimination, and her place in society is in many ways comparable to that of men. All of this assures the country a good position within the ranking of overall indices for international comparisons. Having said that, fundamental gaps remain. Gender birth selection is a reality, particularly in the Red River Delta. Levels of education are still significantly different according to sex. Women's access to credit and capital is undermined by the structure of land titles. Finally, the contrast within family life remains: this facet remains unexplained, other than by blaming the inertia of existing behaviours and conceptions. You should note that absolute

equality between men and women in the home is not necessarily an objective in itself, and is not conceived as such in our approach, because the differentiated roles which each spouse plays are, judging from the evidence, the product of social norms and the reflection of conventions anchored in individuals' identities.

A more in-depth economic diagnostic is indispensable. Women's access to the labour market and the positions which they occupy within it are particularly important indicators, as are the potential differences in earnings for equivalent activities which are often claimed. Taking our database as a starting point, we will work together this week, on these aspects.

### Selective Bibliography

- ADB (2005), Vietnam Gender Situation Analysis.
- AMIN *et al.* (2009), Ethnic Fertility Differentials in Vietnam, Population Council. <http://www.popcouncil.org/pdfs/wp/pgy/018.pdf>.
- PHAM VAN, Bich (1999), The Vietnamese Family in Change: The Case of the Red River Delta, Richmond, Surrey: Curzon Press.
- Education in Vietnam: Evidences from the 2009 Census, UNFPA Factsheet, 2011.
- HAUB, S. and Thi Thu Huong PHUONG (2004), An Overview of Population and Development in Vietnam, Washington, D.C, Population Reference Bureau.
- KNODEL, J., Manh Loi VU, R. JAYAKODY and Vu Tuan Huy (2004), "Gender Roles in the Family: Change and Stability in Vietnam", PSC Research Report, May.
- SHELTON, B. A. and D. JOHN (1996), The Division of Household Labor. Annual Review of Sociology, 22, 299-322.
- Viet Nam Population and Housing Census 2009 (2011), Profile of Key Sex-Disaggregated Indicators from UNFPA.

Day 2, Tuesday 19<sup>th</sup> July

### 2.1.3. The Labour Market. Concepts and Elementary Indicators or an Analysis of Discrimination

[François Roubaud]

We are going to present to you the main indicators and concepts of the labour market by gender and ethnicity, then we will examine the questionnaire from the 2007 employment survey in Việt Nam, on which we are basing ourselves for this training period.

*Relevance of a Discriminatory Analysis of the Labour Market*

[Jean-Pierre Cling]

Why have we chosen the labour market to deal with issues of ethnic and gender inequalities? The main reason is that in developing countries most individuals, and the poorest, have work as their only source of income; they have neither capital nor savings.

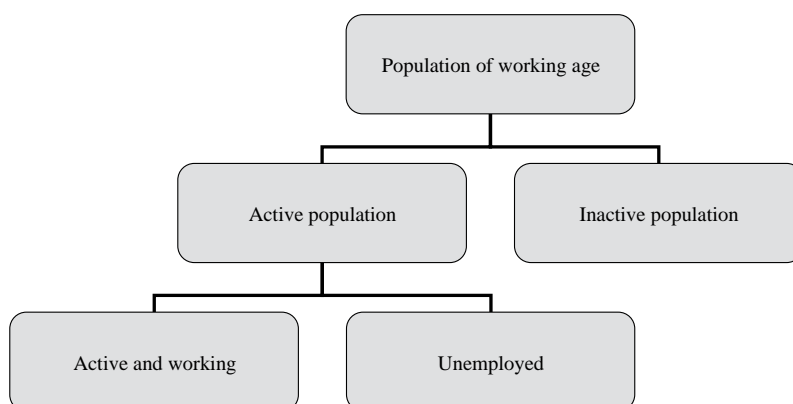
We must, therefore, look closely at the issue of participation in the labour market, at the types of jobs, at incomes from work and at positions within work to try to identify vulnerable populations and touch on issues of gender and ethnic equality. Information on working conditions gives us a real appreciation of living conditions, and offers relevant quantitative comparisons between different groups.

Our objective is to show you the indicators which are indispensable to understanding the labour market. We will take three approaches to this:

- Position in relation to employment and the labour market;
- The structure of the labour market;
- Characteristics of work and working conditions.

*Position in the Labour Market: Concepts, Definitions, Indicators*

#### Scheme 3 Position in the Labour Market - Concepts



Source: Author's construction.



This diagram allows us to mark the position of an individual in relation to the labour market and to employment, covering the population of working age. This population is made up of inactive individuals – individuals who have decided not to work: the rich, women looking after children and not working outside the home, etc. – and the active population – individuals who work or who would like to work. The labour force thus includes employed workers and the unemployed.

Let's define these different concepts more precisely:

- Population of working age: all individuals of 15 years and over (Vietnamese threshold);
- Labour force: all people of 15 years and over who participate in the labour market – employed workers or those looking for a job (unemployed);
- Employed workers: individuals who worked for at least one hour during the period, paid or not, or who were temporarily absent;
- Unemployed: people of 15 years and over without a job, looking for work and available.

Let's move now to the indicators linked with these different concepts.

The first indicator is the activity rate, which corresponds to the working population divided by the population of working age. One can ask oneself about the determinants of the activity rate, and how this rate can vary for different categories of the population. One might imagine a certain number of determinants – economic and cultural factors, etc. – allowing us to differentiate between countries, or the activity rates of individuals within a country. Female fertility, for example, determines a greater or lesser activity rate by country. This rate fluctuates, in practice, from 30% to 80%-90%.

What are your ideas about the value of the activity rate in Việt Nam? What interests us here is not only the average for the country, but also the rates for men and women, between the Kinh and other ethnic groups.

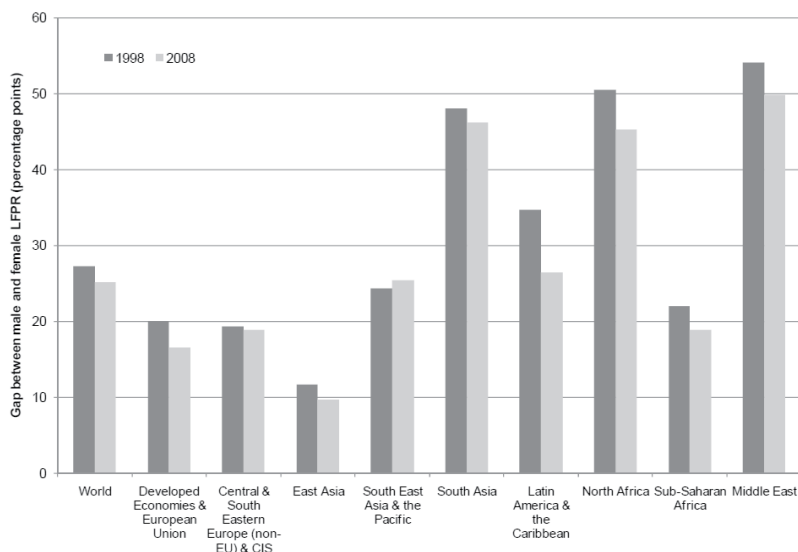
**Trần Phương Nguyên**

I think that the female activity rate is lower than that of men. That derives from traditional values and concepts. It will stay lower than that of men.

**[Jean-Pierre Cling]**

This figure shows the gaps in activity rates between men and women in 1998 and 2008 for different regions of the world.

**Figure 35** *Gaps between Male and Female Rates of Activity in 1998 and 2008 in Different Regions of the World*



Source: ILO.

For South Asia, *i.e.* principally in India, the activity rate of women is 35% and 85% for men. One might question certain issues about measurement, definition of activity rates of women, etc., but on the evidence, there are wide variations by region of the world. Look at the example of Africa, where male and female activity rates are close. One might think that in the poorest countries, activity rates would be close, but in some regions of the world, cultural factors affect this – in the case of North Africa, where the gap between men and women is wider. In Muslim countries, women would be less able to work, for cultural reasons.

Another important type of indicator is the unemployment rate – *i.e.* the number of unemployed as a ratio of the labour force. This rate is hard to interpret in developing countries, because unemployment insurance

doesn't exist, which makes it difficult to declare yourself "unemployed" in a country like Việt Nam. This indicator reveals important differences between different population groups: in France, for example, the unemployment rate is 10% overall but 25% for young people.

### *Structure of the Labour Market*

The labour market can be classified in different ways: by sectors of activity, by types of occupation, by types of employment status and by institutional sectors; obviously, these different structures can also be broken down by gender or by ethnic group. The type of occupation corresponds to what was presented to you by Christophe Jalil Nordman yesterday morning, showing the structural differences between men and women. It is very important to ask oneself

this kind of question: are men found more in industry, for example, or ethnic minorities more in agriculture? We will proceed to shed

light on the structure of employment by institutional sector in the case of Việt Nam.

**Table 34** *Structure of the Labour Market – Institutional Sectors*

	2007			2009		
	Urban	Rural	Total	Urban	Rural	Total
<b>Public</b>	23.8%	6.1%	10.5%	20.2%	5.7%	9.7%
<b>Foreign Enterprise</b>	3.4%	1.5%	2.0%	3.8%	2.5%	2.9%
<b>Domestic Enterprise</b>	11.6%	3.8%	5.7%	14.5%	5.1%	7.7%
<b>Formal HB</b>	16.9%	4.7%	7.7%	15.1%	5.0%	7.8%
<b>Informal sector</b>	31.5%	20.8%	23.4%	31.6%	20.7%	23.7%
<b>Agriculture</b>	11.1%	63.0%	50.4%	14.7%	60.9%	48.1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: LFS, 2007, 2009, GSO. Total: Occupied population; authors' calculation.

Agriculture plays a central role – half of all jobs – and the informal sector accounts for a quarter of jobs. Here too we can expect to see significant structural differences between men and women and between the majority and the minorities.

### *Working Conditions*

Working conditions are a major element determining entry into the labour market, and in the first place under-employment, which is an indicator of imbalance and of under-utilisation of the workforce. Visible

under-employment: worked hours under a threshold (35 hours a week in Việt Nam), willingness to work more and availability to do so. There are obviously lots of other indicators linked to working conditions: whether you work in the street or in a specific workplace, contractual conditions – do you have a contract, days off, social protection? – income, etc.

This table shows informal employment, defined as being work done without social protection, in Việt Nam.

**Table 35** *Working Conditions – Indicators. Informal Jobs as a Principal Activity, by Institutional Sector, 2007 and 2009*

	Number (1,000)	Structure (%)	Enterprise's institutional sector (%)					
			Public sector	Foreign enterprise	Domestic enterprise	Formal HB	Informal sector	Agriculture
<b>2007</b>	37,705	81.9	12.3	17.2	52.9	48.0	100	99.0
<b>2009</b>	38,288	80.5	12.6	12.9	48.0	51.6	100	98.6

\* The total number of jobs is not exactly equal to the sum of all jobs by sector;  
0.3% of jobs cannot be classified within an institutional sector.  
Source: LFS, 2007, GSO; authors' calculation.

80% of employment was informal in 2009. Note the share of informal jobs within formal individual enterprises, domestic enterprises, enterprises with foreign investment and the public sector – more than 10% of informal jobs. Informal employment is present in every sector in Việt Nam, and not only – as one might think – in agriculture and the informal sector.

*The second part of the morning was devoted to practical work on Stata. To start off, the employment survey of 2007, led by the General Statistics Office (GSO) with the participation of IRD-DIAL, was presented by François Roubaud – alignment with international standards, and adaptation to the specific context of the Vietnamese labour market.*

*Since 2011, the survey has been carried out continuously in the field. It is thus possible to produce figures monthly, quarterly or annually and to follow very closely the economic conditions of the labour market. It's a household survey; families are chosen at random over the entire national territory then, in each household, all members are questioned about their situation as regards the labour market. Since the data emerging from the 2007 survey are still confidential, the training was organized to look at a sub-sample: one person in four was selected, which represents a database of 165,000 people.*

*The employment survey is made up of two distinct parts: socio-demographic characteristics of individuals (age, sex, ethnicity, level of education, situation in relation to the head of household, marital situation); and the indicators of the labour market.*

*The session on Stata focused on the construction of variables allowing us to identify those who were working, not working and unemployed. The task of disaggregating data was started, so as to identify the position of each target group within the labour market.*

### *Measurement of Diversity and Discrimination: Issues, Constraints and Risks*

**[Mireille Razafindrakoto]**

We're going to examine the issue of ethnic inequalities in the world via a number of illustrations. The aim of this presentation is to question ourselves about the notion of inequality, the underlying issues and questions.

How do we deal with the issue of the rights of certain minorities? In different regions, we can see today a weakening of policies openly aiming at assimilation. There are different types of devices, depending on the recognition of specific cultural characteristics (cultural mediation, representation and political participation of minorities) or on assimilation policies (these are fewer and fewer in number), or on policies of positive ethnic discrimination (for access to employment, to the public market, to higher education and so on) with quotas reserved in business, in schools and universities, etc.

The researcher's objective is to try to identify the origin of and the factors which cause these inequalities, which indicates the need to question not only the natural factors, individuals' characteristics, but also the policies and measures implemented. Measures to reduce inequalities often include

devices which unify and integrate different groups under a generic framework which applies to the whole population without necessarily taking account of specificities – integration policies. Are these policies adapted? Shouldn't ethnic specificities be taken into account so as better to reduce inequalities? Should one clearly recognize the differences and specificities or favour the integration of groups into a single framework? In fact, policies of positive discrimination can cause problems: for the sake of equality, public action defines itself in terms of ethnic and cultural criteria and poses the question of legitimacy; the crystallization of stereotypes can result in even stronger discrimination.

There are two types of method for measuring diversity and discriminations: experimental or *testing* methods and statistical methods, which are the subject of our workshop this week.

- Experimental methods consist of the artificial construction of pairs – job-seekers, those in need of accommodation, etc. – within which the two members only differ in one characteristic (ethnic group, origin, etc); if one member is less well treated than the other, we consider that there is discrimination on the basis of that one characteristic – an “all other things being equal” observation. For example, we assume that there are inequalities due to the origin of individuals, between “hereditary” French and French of foreign extraction. We create a situation of access to accommodation in which two people with almost identical characteristics can interact – same level of income, education, age, geographical location, etc.: two individuals with the most similar characteristics possible, apart from their

origin. We then observe, in a direct test, whether a difference exists in the treatment of these two people in access to accommodation, which would indicate discrimination.

In our work, we seek to reproduce these experimental methods, using survey data based on a representative sample of a large number of individuals;

- Statistical methods are based on representative surveys of the population with enough individuals brought together, individually or collectively, to allow a comparison in the form of categories, and the construction of divergences.

We are aiming to observe divergences between ethnic groups and to examine whether they could be explained by another variable, or not – does the ethnic origin explain the divergences? For this, it's important to control for the various variables which could explain the divergences noted: the age of individuals, their sex, income, social position, place of residence, etc.

Let's take the example of earnings from work. We can note that in Việt Nam, as in many countries, the “minority” ethnic groups have a much lower income than the rest of the population. This difference can result, at least partly, from the kind of employment which the different groups are engaged in, from the number of hours worked, from the level of education and qualification, and from individuals' experience. After taking account of – correcting for – these factors, the earnings gap to the disadvantage of the minority group can provide an indicator of “discrimination”.

Another major question. It is important to ask what exactly one is measuring. What are the criteria retained? What are the variables and how are they gathered? Are the criteria

for ethnic differentiation under consideration relevant? Should we give more weight to objective or subjective criteria, imposed criteria or the self-declaration of individuals?

*Ethnic Discrimination and Inequality in the World: Some Illustrations*

**Table 36** *Incidence of Poverty*

	Indigenous People (%)	Non-Indigenous
Democratic Republic of Congo/2005	84.8	71.7
Mexico/2008	80.6	45.3
Ecuador/2006	78.0	46.6
Guatemala/2006	74.8	36.2
Gabon/2003	70.1	32.7
Bolivia/2006	69.3	46.0
Peru/2005	62.3	35.0
Vietnam/2006	52.3	10.3
Lao PDR 2002	50.6	25.0
Brazil/2002	48.0 <sup>a</sup>	23.0 <sup>b</sup>
India/2004	43.8	22.7
Chile/2006	15.2	9.1
China/2002	5.4	3.5

*Note: Head count poverty rates are national.*

*a. Refers to white and "black/brown" (African origin).*

*b. Refers to white (Telles, 2007). Head count poverty rates are national.*

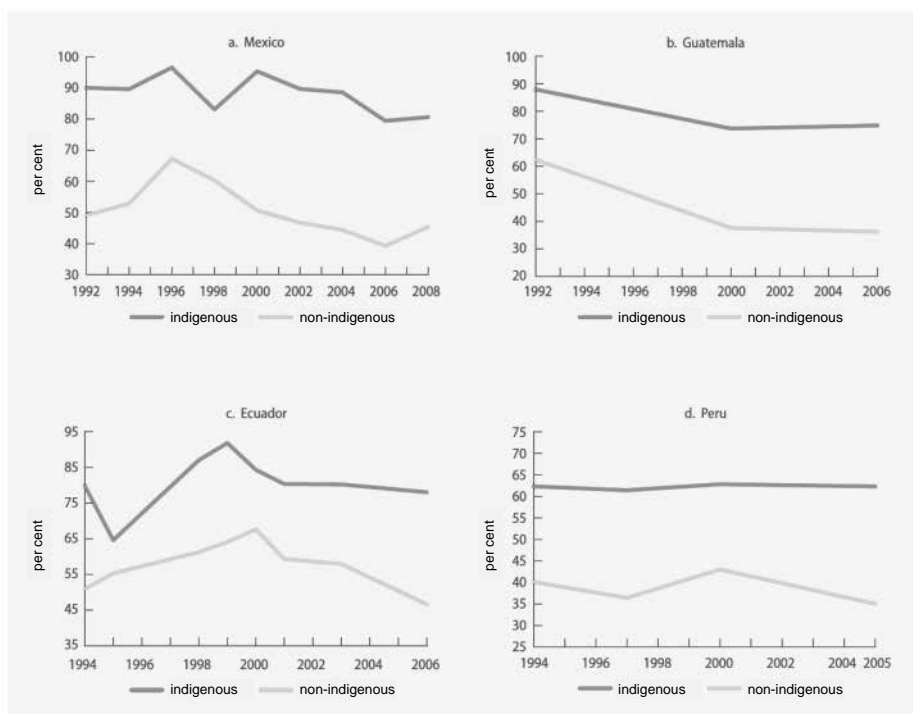
*Note: Indigenous population refers to groups known by terms such as ethnic minority, aboriginal, minority nationalities, tribes, etc. in the different countries (World Bank Operational Directive 4.10)*

*Source: World Bank (2011), Improving the Odds of Achieving the MDGs, Global Monitoring Report 2011.*

Globally, in different countries in the world, minorities have a far higher poverty rate than the rest of the population – the divergence

can be as much as double (Gabon, Peru). The differences do not diminish and even tend to widen:

**Figure 36** *Progress in Terms of Reducing the Poverty of Indigenous Populations: Mixed Results*



Source: World Bank (2011), *Improving the Odds of Achieving the MDGs*, Global Monitoring Report 2011.

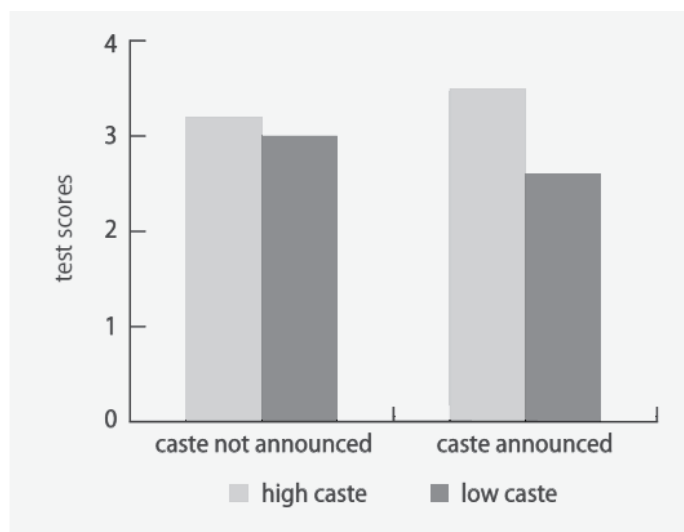
Even though poverty is diminishing, the pace of poverty reduction is much slower for minority groups.

The number of years of schooling is a major variable, and one where minority groups are still at a disadvantage: it can explain income inequality, and we should therefore ask ourselves the reasons for this difference of

education between majority and minority populations. It reveals the existence of a vicious circle: certain population groups might not invest in education, if that investment doesn't bring them the same salary as other population groups.

Let's look at this experiment in India, which underlines the impact of stigmatization.

**Figure 37** *The Internalization of the Phenomena of Stigmatization. Results of an Experiment in India*



Source: Hoff and Pandey 2009, World Bank (2011), *Improving the Odds of Achieving the MDGs*, Global Monitoring Report 2011.

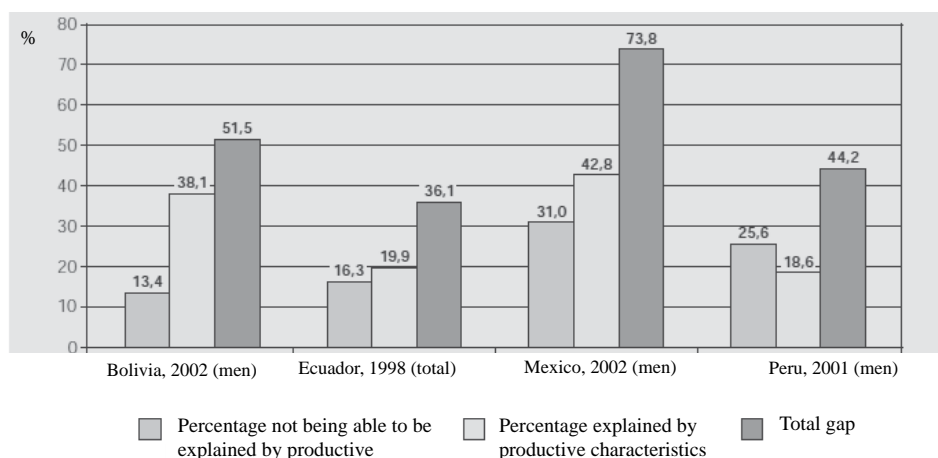
This study looked at a group of individuals from different castes. At the outset, these people were not asked to what caste they belonged: a slight difference to the disadvantage of the inferior castes was noted. In the second stage, they were asked to specify to which caste they belonged: the results showed a much wider gap between the two groups; the higher-caste people

had much higher results than those of lower caste. This leads us to ask about the effect of internalization both among those subject to discrimination, and also among the higher caste.

The diagram below examines the gap between the income of indigenous workers and that of other workers in four South American countries:



**Figure 38** *Divergence between the Income of Indigenous Workers and that of Other Workers*



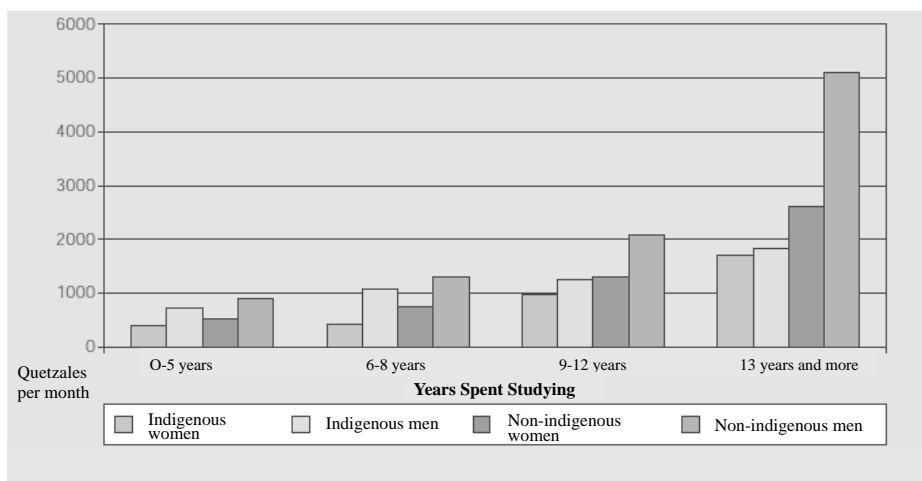
Source: Hall and Patrinos (Ed.) (2006). *Indigenous Peoples, Poverty and Human Development in Latin America 1994-2004* (Palgrave Macmillan).

We can clearly distinguish the shares of the earnings gap, the part which can be explained by productive characteristics and the part which might bear witness to discrimination. Let's take the case of Peru in 2001: a divergence in earnings was noted between the "indigenous population" and

the others – an overall gap of 44%. About 20 percentage points can be explained by productive characteristics; thus 25 to 26 percentage points remain unexplained.

This other graph also concerns income gaps linked to ethnic origin.

**Figure 39** *Divergence in Income According to Gender and Ethnic Origin in Guatemala, 2000*

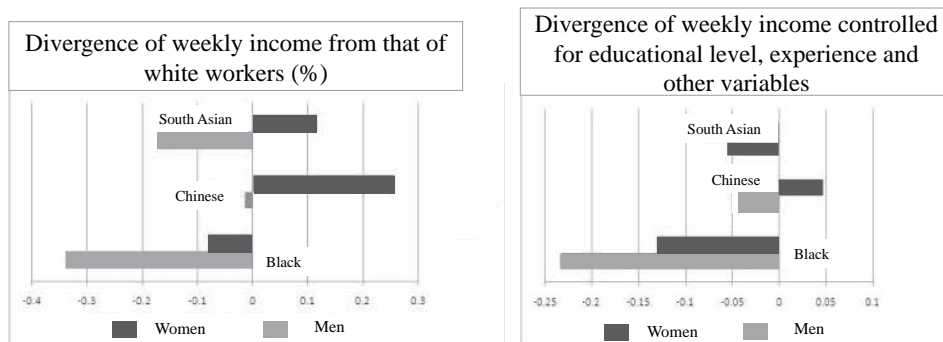


Source: Sauma, Las desigualdades etnicas y de genero en el mercado del trabajo del Gutermala (Geneva, ILO, 2004).

What is particularly interesting in the case of Guatemala is that the more educated people are, the more the income gap between the majority population and the indigenous groups widens.

This last example from Canada underlines the importance of taking the diversity of situations into account and emphasizes that we should not group all minorities into one single category.

**Figure 40** *Divergence in Income between White Workers and Other Workers in Canada, 2005*



Source: Canada, 2006 Census data (Hou and Coulombe).

We can distinguish three types of populations: black, Chinese and other South Asian populations. What's interesting is the wide diversity of situations according to gender. In Canada, women of Chinese or South Asian origin have higher incomes than black workers. From the second graph, we can see whether the gaps are due to the level of education, to individuals' experience or to other identifiable characteristics; we see again the gap in favour of women of Chinese origin; on the other hand, the income gaps are always disadvantageous towards the black population.

#### Jean-Luc Maurer

It is important to differentiate discrimination from inequalities, because often there is inequality without necessarily discrimination. We are lucky in Việt Nam to have access to data which have to some extent an ethnic basis. A close analysis of inequalities and discriminations on the basis of ethnic origin is not really possible in Indonesia.

Let's take the example of New Caledonia, which is indirectly of interest to Việt Nam, and where I worked for several years studying the Javanese minority. This country has had a settled Vietnamese minority since the late 19<sup>th</sup> century. I used in my research the 1996 census, which, contrary to the French tradition, was done on an ethnic basis. I was therefore impatient for the 2004 census, but the French President cancelled it precisely for ethnic reasons. So it wasn't possible to measure the evolution of the socio-economic situation of the Javanese minority, nor the Vietnamese minority, nor above all that of the overwhelming Kanak majority. In reality, it was to avoid measuring the evolution – or rather the non-evolution – of the Kanak

population that the census was cancelled. You can see from this example that censuses with an ethnic basis provide economists and sociologists with very precious data with which to measure the differences which exist between groups according to their ethnic origin.

#### Grégoire Schlemmer

If you measure something you necessarily have to categorize it. I'm an anthropologist and I work on ethnic groups, I try to understand these categories but I admit I'm not succeeding in grasping them! When I use pre-formed categories, this causes problems because they are social constructions. I'm studying a province of 160,000 inhabitants in Laos; I've seen races, castes, minorities, aboriginals, native and indigenous people and it's hard for me to establish a comparison.

Besides, there are potentially always variables which one cannot observe in the statistics, which are visible in the field. In Nepal, where I've worked, there is a correlation between ethnic statistics and armed conflict. Across the Indian world, where there is positive discrimination, this creates divisions and an incredible level of violence. These tools are highly dangerous to use.

#### [François Roubaud]

These comments raise three major points for our workshop: beware of pre-established categories – a fixed total of 53 is quoted for the number of minority groups in Việt Nam but the concept remains hazy and, without taking a critical approach, the issue of real ethnic identity is missed; beware not to approximate inequality and discrimination, I personally would speak more of differences

which result in inequalities. We see that with our quantitative instruments we try to identify what is left *in fine* and could be a kind of discrimination; finally, downstream of and alongside policies, if you work on ethnic groups you take the risk of solidifying identities and potentially of generating or maintaining ethnic conflict – as in the case of Nepal.

### Selective Bibliography

CENTRE D'ANALYSE STRATÉGIQUE (2011), « La prise en compte de critères ethniques et culturels dans l'action publique, une approche comparée », La note d'analyse, questions sociales, n°220, April.

HOU, F. and S. COULOMBE (2010), "Earnings Gaps for Canadian Born Visible Minorities in the Public and Private Sectors", *Canadian Public Policy*, 36(1), March, pp. 29-43.

INTERNATIONAL LABOUR ORGANIZATION (2007), *Equality at work: Tackling the Challenges*, Report of the Director-General, International Labour Conference, 96<sup>th</sup> session.

NORDMAN, C., A.S. ROBILLIARD and F. ROUBAUD (2012), « Décomposition du différentiel de rémunération selon le sexe et le groupe ethnique dans sept métropoles d'Afrique de l'Ouest », in De Vreyer, P. and F. Roubaud (Eds.), *Les marchés du travail urbains en Afrique Sub-saharienne*, chap. 13, Editions IRD/AFD, Marseille (forthcoming).

SIMON, P. and J. STAVO DEBAUGE (2004), « Les politiques anti-discrimination et les statistiques : paramètres d'une incohérence », *Sociétés contemporaines*, Presses de Sciences Po, n° 53, pp. 57-84.

WORLD BANK (2010), "Assisting Indigenous and Socially Excluded Populations", in *Global Monitoring Report 2011: Improving the Odds of Achieving the MDGs*, chap. 4, pp.103-123.

*The day finishes with the work begun in the morning on Stata, to break down data by ethnic group and gender – calculation of employment rates according to context (urban or rural), area of residence and ethnic group, etc.*

## Day 3, morning of Wednesday 20<sup>th</sup> July

[François Roubaud]

This morning will be devoted to a presentation on the issue of discrimination, and the session will be completed tomorrow morning. We will then go on with the practical use of *Stata*, with your results on labour market indicators by gender and ethnic group; finally, we will form working groups for the study of the eight geographical regions of Việt Nam.

### 2.1.4. Discriminations in the Labour Market in Developing Countries

[Christophe Jalil Nordman]

We're going to cover theoretical and methodological aspects which economic science has developed to explain the presence of discriminatory phenomena in the labour market; our angle of reflection

will focus mainly on theoretical approaches to discrimination and the measurement of discrimination, approaching it by breaking it down, and some international comparisons.

What is the Legal Framework which Governs Discrimination? Definition of the Concept of "Discrimination"

The expression discrimination describes any distinction, exclusion, restriction or preference based on race, colour, family background or national origin – age, sex, religion etc. – which has as its aim or effect to destroy or compromise the recognition, enjoyment or exercise, in conditions of equality, of the rights of man and fundamental freedoms in the political, economic, social and cultural domains or in any other domain of public life.

The International Labour Organization (ILO) also defines discrimination in a relatively precise way:

#### Box 4 Definition of the Concept of "Discrimination"

*"Any distinction, exclusion or preference based on race, colour, sex, religion, public opinion, national origin, which results in the destruction or alteration of equality of opportunity or treatment in terms of employment or profession."*

*International convention on the elimination of all forms of racial discrimination of 21<sup>st</sup> December 1965: <http://www2.ohchr.org/french/law/cerd.htm>*

*"Any other distinction, exclusion or preference which results in the destruction or alteration of equality of opportunity or treatment in terms of employment or profession, which can be specified by the interested person after consulting organizations for the representation of employers and workers if these exist, and other appropriate organizations."*

*Convention 111 of the ILO on discrimination in employment and professional life of 25<sup>th</sup> July 1958: <http://www2.ohchr.org/french/law/emploi.htm>*

### *Theoretical Approaches in Economics*

Following the analysis by Becker (1957), numerous works focused on the theoretical problem posed by discrimination, concentrating mainly on the pay gaps between men and women. These studies all took the same definition of discrimination – different treatment of workers with identical productivity – and can be divided into two categories:

- Theories based on discriminatory preferences, which can be termed neoclassical: the employers have perfect knowledge of individuals' productivity. We're dealing here with a tendency towards discrimination (Becker, 1957) coming from employers (Bergmann, 1971; Arrow, 1973) or from male workers or consumers, which discourages the hiring of women in, or excludes them from, a number of jobs reserved for men (occupational segregation; Bergmann, 1971; 1974);
- Following the work of Phelps (1972), discrimination is based on the employers' lack of information about the productivity of workers. For Phelps (1972), knowledge about productivity depends on individual signals. He refers to statistical discrimination. For Arrow (1973), the employers have beliefs based on observation or prejudices about the correlation between gender and performance.

More complex analyses brought additional information about the justification for discriminatory behaviour or the enduring nature of discrimination over the long term, adding onto the initial approaches to the theory of human capital and models of demand and supply in the labour market (Lundberg and Startz, 1983; Stiglitz, 1982; Oettinger, 1996).

### *The Measurement of Discrimination: The Break-down Approach*

One way of measuring discrimination is the break-down approach. For the sake of argument, we will measure an aspect of discrimination, that of earnings from work. Before developing the methodological aspects, with these methods and those which you will learn on *Stata*, we will only attempt to make an approach to measurement. Why are these methods useful but imperfect?

To measure discrimination, whether it be the income gap between a man and a woman or between two ethnic groups, you must have a variable of income, of salary, and then a group of characteristics –  $X$  – which is supposed to measure the productivity of the worker in his job. Two economists, Oaxaca and Blinder in 1973, became famous for their break-down methods: they invented a way of separating, within the variable of income, one part which could be attributed to differences in productivity between workers, and another part which could be attributed to discrimination or to all the aspects which were not being measured. The first stage of the analysis consists of econometrics.

We could spend months doing econometrics together, so my presentation will be a very brief summary. Economists and (above all) epidemiologists have developed this technique for relating variables to each other for individuals, households and enterprises. These researchers have developed statistical methods to be able to identify a relationship between different variables and to show that one variable can explain the variation of another variable with a statistical model.

- Here's an example. We have a series of observations on income – variable  $Y$  –

and another series of observations on workers' level of education – variable  $X$ . Through econometrics we will try to find a relationship, possibly linear, between variable  $X$  and variable  $Y$ . The idea is that the variation of variable  $Y$  will depend on the variations of variable  $X$  and on a random term which measures exogenous shocks (everything which is not measured in  $X$  and could cause variable  $Y$  to vary).

$$Y = \alpha X + u$$

- If we make a linear projection of  $X$  on variable  $Y$ , we will hypothesise that the random term,  $u$ , is zero mean and that the expectation of  $u$  equals zero.
- This is about identifying the coefficient associated with the variable  $X$  which will measure an effect  $\alpha$  – percentage of variation of variable  $X$  on variable  $Y$ .
- We measure the income of worker  $i$  and the education of worker  $i$ , then a term which measured random shocks, whatever is exogenous and unconnected with education:

$$\text{Income}_i = \beta \text{education}_i + u_i$$

- The coefficient  $\beta$  will tell us if the individual has five years of education; an additional year will result in an effect which one can express as a percentage of his income – let's imagine that  $\beta$  has the value 0.25, so one could say that an additional year of education would bring 25% more income. This is the case when income is expressed as a logarithm. We thus regress the logarithm of income on our explanatory variables – e.g. education:

$$\text{Log}(\text{income}) = \beta_1 \text{education}_i + \beta_2 \text{expe}_i + u_i$$

- This other variable could be, for example, professional experience. One might think that the variation in individuals' income isn't only due to their level of education, but also the time spent working in the labour market. All forms of professional experience are explanatory variables, which need to be included in this type of econometric model;
- You can see that now we have two coefficients  $\beta_1$  and  $\beta_2$ .  $\beta_1$  is the marginal effect of education on income,  $\beta_2$  is the marginal effect of professional experience on income. We see that the effects of education and professional experience have been distinguished by income: we have been able to isolate the effect of education from the effect of experience on our variable of income.

The most widely used approach to evaluate the percentage gap in average salary between two groups (men and women, nationals and foreigners, etc.) which could be attributed to discrimination, that is a gap not justified by the differences in the composition of the manpower, is the approach recommended in the work of Oaxaca (1973) and Blinder (1973).

The recommended break-downs are based on the estimation of earnings functions of "Mincerian" type for men and for women. They take the form:

$$\ln w_i = \beta x_i + \varepsilon_i$$

where  $\ln w_i$  is the natural logarithm of the hourly pay rate observed for individual  $i$ ,  $x_i$  is a vector of observed characteristics,  $\beta$  is a vector of coefficients and  $\varepsilon_i$  is an error term of zero mean.

We will estimate this equation for a group of men and a group of women, and we could

proceed in the same way for different ethnic groups. The result will be two vectors of different  $\beta$  coefficients. We could reproduce this exercise for different sectors of activity, making a distinction between a  $\beta$  for the formal sector and a  $\beta$  for the informal sector.

We will try to get closer to the characteristics which could justify men and women having different incomes. What could we include over and above education and experience which would explain why a man or a woman should be more productive in their work?

**Yves Perraudau**

In work done in the USA and in France, age is an important factor; above 55 years old, age becomes a disadvantageous factor.

**Nguyễn Thị Văn**

I think that income can be explained in relation to the location, the place where a person resides; the cost of living can explain the income level of an individual.

**Lê Thị Hồng Hải**

I think that the age variable is well coordinated with professional experience.

One must assume that one will study men and women of the same age group. I think that age should not be introduced into this equation. I suggest another variable, which is type of job.

**[Christophe Jalil Nordman]**

The geographical place of origin is not a true measure of productivity, but it is a measure of the differences in income between individuals. In econometrics, we would use a set of variables known as controls, which can capture effects which are not individual

but have an effect on the variable. On the other hand, introducing the kind of job which the worker has doesn't seem relevant to me, because what we're trying to measure is all variables which do not result from discriminatory practice by the employer – or from occupational segregation.

**Phạm Quang Linh**

The choice of variables must satisfy two conditions: they must have a direct impact on the person's productivity, and they must depend on the differentiation between men and women. I suggest introducing into this equation the person's health and the time they have available.

**[Christophe Jalil Nordman]**

These are excellent suggestions. Health is a dimension of human capital which isn't used enough in surveys – and little used in employment surveys. I would add some other characteristics like having children, or being married or single for example.

Let's come back for a moment to the equation above. The measurement of income level is relatively imperfect, as we cannot completely explain all the variations of the variable  $w$ . There remains an element of explanation –  $\varepsilon$  – which is left to econometrics, without which we cannot extract information. This problem arises when we have a survey database with a representative sample population. We lack certain pieces of information to say that the only observed difference in the level of the dependent variable between two groups is gender or ethnic group.

How can we obtain two groups of individuals – men and women, minority and majority



ethnic groups – which are absolutely identical with the exception of their sex or ethnicity?

One simple method depends on using large numbers. Imagine that you are in Hanoi, on a very busy road and that you are sorting men to the right and women to the left so as to form two completely random groups. You will notice, if you remain on this very busy street for long enough and therefore obtain a large number of men and women in each group, that the two groups will be absolutely identical in terms of age, education and experience. For all these characteristics, and many more, they will have the same level on average. This principle depends on the law of large numbers – by selecting enough individuals in a random manner, one obtains two groups with absolutely identical average characteristics, with the exception of the one characteristic on the basis of which the two groups were sorted. On the other hand, employment surveys don't usually allow this kind of random experiment, and we won't therefore have two groups of individuals who are absolutely identical in every way with the exception of the variable which causes the discrimination we are trying to measure. This is why I said to you in my introduction that it is an imperfect measure of discrimination which we are going to apply here.

I would add that if we wanted to measure income discrimination using the two groups of individuals which we had formed by the random method, we would simply need to calculate the difference in income between the two groups. One would then have a perfect measurement of discrimination if the random protocol was correctly constructed – if we had stayed long enough in the busy street, if our two groups were large enough, etc.

## Selective Bibliography

- ALBRECHT, J., A. BJÖRKLUND and S. VROMAN (2003), "Is There a Glass Ceiling in Sweden?", *Journal of Labor Economics*, n° 21:145-177.
- ALTONJI, J. G. and R.M. BLANK (1999), "Race and Gender in the Labor Market", in Orley Ashenfelter and David Card, *Handbook of Labor Economics*, Volume 3C, North Holland, Amsterdam, pp. 3143-3257.
- ARROW, K.J. (1973), "Higher Education as a Filter," *Journal of Public Economics*, Elsevier, vol. 2(3), pages 193-216, July.
- APPLETON, S., J. HODDINOTT and P. KRISHNAN (1999), "The Gender Wage Gap in Three African Countries", *Economic Development and Cultural Change*, 47, n° 2:289-312.
- BARBARA, R. (1971), "The Effect on White Incomes of Discrimination in Employment," *Journal of Political Economy*, 79(2), pp. 294-313.
- BECKER, G. S. (1957, 1971, 2<sup>nd</sup> ed.), *The Economics of Discrimination*, Chicago, University of Chicago Press. Bergmann.
- BERTRANOU, F. (2001), "Pension Reform and Gender Gaps in Latin America: What are the Policy Options", *World Development*, 29(5), pp. 911-923.
- BLINDER, A.S. (1973), "Wage Discrimination: Reduced Form and Structural Estimates", *The Journal of Human Resources*, 8, n° 4:436-455.
- COTTON, J. (1988), "On the Decomposition of Wage Differentials", *The Review of Economics and Statistics*, n° 70: 236-243.
- DATTA GUPTA, N., RONALD L. OAXACA and N. SMITH (2006), "Swimming Upstream, Floating Downstream: Comparing Women's Relative Wage Progress in the United States and Denmark," *Industrial and Labor Relations Review*, vol. 59(2), pp. 243-266.

- DE LA RICA, S., J. DOLADO and V. LLORENS (2008), "Ceiling or Floors? Gender Wage Gaps by Education in Spain", *Journal of Population Economics*, 21, n° 3:1432-1475.
- JELLAL, M., C.J. NORDMAN and F.-C. WOLFF (2008), "Evidence on the Glass Ceiling in France Using Matched Worker-Firm Data", *Applied Economics*, 40(24), pp. 3233-3250.
- LUNDBERG, S.J., and R. STARZ (1983), "Private Discrimination and Social Intervention in Competitive Labor Markets", *American Economic Review*, 73, 340-47.
- NEUMARK, D. (1988), "Employers' Discriminatory Behavior and the Estimation of Wage Discrimination", *The Journal of Human Resources*, n° 23:279-295.
- NORDMAN, C.J., F. RAKOTOMANANA and A.-S. ROBILLIARD (2010), "Gender Disparities in the Malagasy Labor Market", in *Gender Disparities in Africa's Labor Market*, Arbache J.S. et al. (Eds.), Chapter 3, Africa Development Forum Series, Washington, DC, The World Bank, pp. 87-154.
- NORDMAN, C.J., A.-S. ROBILLIARD and F. ROUBAUD (2011), "Gender and Ethnic Earnings Gaps in Seven West African Cities", *Labour Economics*, 18, Supplement 1, pp. 132-145.
- NORDMAN, C.J. and F. ROUBAUD (2009), "Reassessing the Gender Wage Gap in Madagascar: Does Labor Force Attachment Really Matter?", *Economic Development and Cultural Change*, 57(4), pp. 785-808.
- NORDMAN, C.J. and F.-C. WOLFF (2009a), "Is there a Glass Ceiling in Morocco? Evidence from Matched Worker-Firm Data", *Journal of African Economies*, 18(4), pp. 592-633.
- NORDMAN, C.J. and F.-C. WOLFF (2009b), "Islands Through the Glass Ceiling? Evidence of Gender Wage Gaps in Madagascar and Mauritius", in *Labor Markets and Economic Development*, Ravi Kanbur and Jan Svejnar (eds), chapter 25, pp. 521-544, Routledge Studies in Development Economics, Routledge.
- NORDMAN, C.J. and F.-C. WOLFF (2010), "Gender Disparities in the Malagasy Labor Market", in *Gender Disparities in Africa's Labor Market*, Arbache J.S. et al. (Eds.), Chapter 3, Africa Development Forum Series, Washington, DC, The World Bank, pp. 87-154.
- OAXACA, R.L., (1973), "Male-Female Wage Differentials in Urban Labor Markets", *International Economic Review*, 14, n° 3:693- 709.
- OETTINGER, G. (1996), "Statistical Discrimination and the Early Career Evolution of the Black-White Wage Gap", *Journal of Labor Economics* vol. 14, n° 1, pp. 52-78.
- PHELPS, E.S. (1972), "The Statistical Theory of Racism and Sexism", *The American Economic Review* (AER), 62(4), 659 - 61.
- REIMERS, C.W. (1983), "Labour Market Discrimination Against Hispanic and Black Men", *The Review of Economics and Statistics*, 65, n° 4:570-579.
- STIGLITZ, J.E. (1982), "Alternative Theories of Wage Determination and Unemployment in L.D.C.s: The Efficiency Wage Model", in Gersowitz M. et al. (Eds.), *The Theory and Experience of Economic Development: Essays in Honor of Sir W. Arthur Lewis*, Allen & Unwin, pp. 78-106.
- WORLD BANK (2001), *Engendering Development: Through Gender Equality in Rights, Resources, and Voice*, Washington, DC, The World Bank.

*The participants follow their training in Stata using the database from the employment survey: they analyze unemployment rates, pluri-activity, under-employment, etc. The objective is to find an opening according to gender and ethnic origin, and to bring back elements of analysis to the workshop; correlations are also found with age, level of education, place of residence, institutional sector, gross income, etc.*

*The end of the morning is given to forming working groups to establish a diagnostic by region which will be the subject of a report to all participants in the 2012 summer school.*

## Day 4, Thursday 21<sup>st</sup> July

[François Roubaud]

We're going to conclude our discussion of methods for breaking down data started yesterday morning. The end of the morning will be dedicated to practical exercises on *Stata*, and then you will get started on the gender and ethnicity diagnostic in the regions which you have chosen.

[Christophe Jalil Nordman]

On Wednesday morning, we touched on issues of discrimination in terms of legal bias at the international level. Then we developed the theoretical approaches to discrimination in the labour market, emphasizing the economic theories of the 1970s; finally, we concluded with methods of breaking down data by working out equations of gains by gender.

Let's come back to this last point. When we speak of equations of salary, we refer to workers who are employed in a private or

public enterprise, whether this is in the formal or informal sector; when we talk of gains, this is a widely defined notion of salary, including self-employed workers and all forms of remuneration for work. So we'll look from a generalized point of view at discrimination in the labour market.

We seek to work out a gains equation, with the logarithm of the worker's gain  $i$  as the dependent variable; this will be identified by a group of characteristics –  $x_i$ . These characteristics  $x_i$  are supposed generally to measure the productivity of the worker – his work and active life. For the sake of our argument, the coefficient  $\beta$  will be estimated by *Stata*: the software calculates an average coefficient which represents the average effect of characteristic  $x$  – education, experience, marital status, number of children, etc. This coefficient  $\beta$  will be assigned to each of the characteristics and will represent the average effect of this characteristic on the logarithm of salary or gains. It will therefore be possible to interpret it as a percentage effect of variation of the variable  $X$  on the dependent variable.

What is the relationship with discrimination? In reality,  $\beta$  represents the way in which characteristics of workers are remunerated in the labour market. It is the yield of characteristics in the labour market – of a man *versus* a woman, of someone from a particular ethnic group, etc.

Let's take an example:

- You are a woman; your level of education brings you a certain yield, which is linked to the qualification you achieved; *i.e.* your Master's for example brings you 10% more remuneration over and above that which

you would have earned if you had not obtained this qualification;

- You are a man; you have the same qualification level, and you enter the labour market; your yield is not 10% higher but 12%. The difference in yield of two percentage points is what one can interpret as discrimination – the difference in yield from education on the labour market.

The idea of this approach is to estimate the yield difference in the labour market which stems from one characteristic – e.g. education, experience. We will therefore estimate the coefficient  $\beta$  both for men and for women, so as to be able to argue that the difference between them represents discrimination in the labour market.

We will look at difference in salary by gender. The recommended breaking down of data depends on estimations of functions of gain of the “Mincerian” type, for men and for women. They take the form:

$$\ln w_i = \beta x_i + \varepsilon_i$$

where  $\ln w_i$  is the natural logarithm of hourly salary rates observed for the individual  $i$ ;  $x_i$  is a vector of observed characteristics;  $\beta$  is a vector of coefficients and  $\varepsilon_i$  an error term of zero mean.

Put simply, the use of a logarithm implies a transformation of the salary variable allowing us to obtain percentage effects of our dependent variables; the logarithm function is useful, notably to obtain reasonable variations.

We have an econometric equation with an estimator which allows us to assume that the random term  $\varepsilon$  is zero mean. If we want to measure the difference in average salary between men and women, we will use a

sample mean and the random terms –  $\varepsilon$  – will cancel out; they are out of the equation. We develop the expression:

$$\ln w_m - \ln w_f = \beta x_m - \beta x_f$$

I explained earlier: the issue that causes problems in measuring discrimination is that we’re seeking to compare two groups – men and women for example – and we must be certain that the two groups are absolutely identical in every way, with the exception of one characteristic, sex. To meet this requirement, econometrists and statisticians often use an income distribution described as “counterfactual” (fictitious), i.e. a situation where, for example, women would be paid as men are in the labour market. As soon as the difference in these two distributions has a non-zero average (and is positive), we can posit the existence of income discrimination to the disadvantage of women, and therefore formalize it.

Formally, the salary gap using this kind of counterfactual is written in the following way:

$$\overline{\ln w_m} - \overline{\ln w_f} = \underbrace{\beta_m (\bar{x}_m - \bar{x}_f)}_{\text{Explained part of the differential}} + \underbrace{(\beta_m - \beta_f) \bar{x}_f}_{\text{Unexplained part or part generally attributed to discrimination}}$$

- $\overline{\ln w_m}$  and  $\overline{\ln w_f}$  represent estimated average salary;
- The indices  $m$  and  $f$  indicate male and female workers;
- $\bar{x}_m$  and  $\bar{x}_f$  correspond to averages of the characteristics;
- $\beta_m$  and  $\beta_f$  correspond to the yield of these characteristics estimated in a gains equation.

The gap in average revenue (expressed in a logarithm) breaks down into:

- A first part which corresponds to the difference in the averages of these characteristics in the labour market (or “explained” part);
- A second part which represents the gap between the two populations under consideration in terms of the yield of these characteristics (or “unexplained” part).

If the structure of the two populations was similar for the variables under consideration (education, experience, etc.) any gap in revenue would result solely from a gap in the yield of these characteristics. We would then be in a case of “pure salary discrimination”. If the yields were equal, the gap in revenue would be explained entirely by structural effects, *i.e.* average characteristics, which themselves could potentially be the consequence of other forms of discrimination – for example access to education.

Even if there are no differences in the yield from characteristics in the labour market, the difference in characteristics itself can still bring about effects which are discriminatory. Generally, women have less professional experience than men because they remove themselves from the labour market more often – *e.g.* due to maternity – and employers hesitate to employ them or to offer them long-term contracts.

The breakdown below has been used a great deal in academic work since the 1970s. The main difficulty is to be able to determine *a priori* a non-discriminatory “norm” for the yield from individual characteristics, and to measure against this norm the male advantage, the female disadvantage and

the share which results from the gap in characteristics. With a hypothesis of salary discrimination, for example, it’s possible that men receive competitive salaries – they are paid according to their marginal productivity – but that women are underpaid. In this case, the norm of non-discriminatory remuneration would be that of men.

In the first equation quoted, the gaps in yield are weighted by the average of the characteristics of women and the gaps in characteristics are weighted by the corresponding yields of men. However, it is also possible that we are seeing a situation of preferential treatment in favour of men, a situation in which women would receive competitive salaries but the men would be paid more. In this case, the non-discriminatory salary norm would be that of women. Empirical studies show that the choice of weighting can have important effects on the results of the breaking down.

Several other ways of weighting have been envisaged, notably those of Reimers (1983) and Cotton (1988). In many recent studies, the authors use the weighting recommended by Neumark (1988); he recommends using as the non-discriminatory norm the results of the estimation of a gains equation for the whole of the population under consideration, both sexes mixed together. The breaking down of the mean revenue is thus written in three parts:

$$\ln w_m - \ln w_f = \beta^* (x_m - x_f) + [(\beta_m - \beta^*) x_m + (\beta^* - \beta_f) x_f]$$

Explained part  
of the differential

Unexplained part or part  
generally attributed to  
discrimination

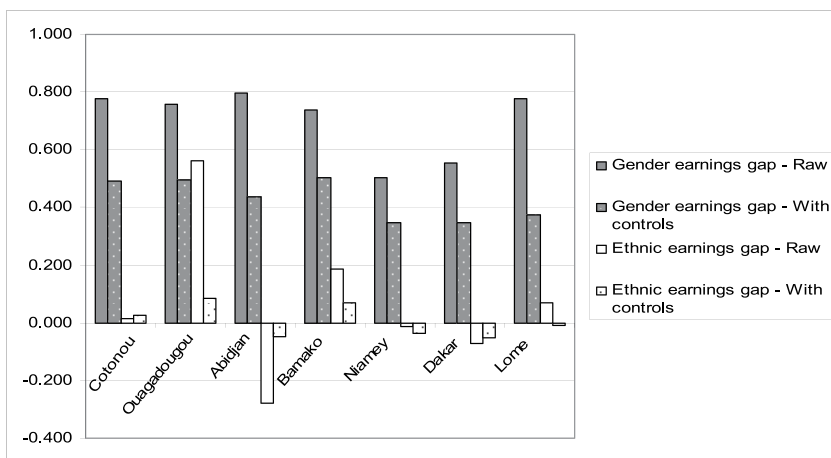
- The first term represents the “explained” part of the salary gap, using as a weighting the average yield of the entire sample;
- The second term indicates the gain in yield from characteristics due to the fact of being a male worker, compared to the norm;
- The third term corresponds to the deficit in yield from characteristics due to the fact of

being a woman. The two last terms added together thus represent the total salary discrimination.

The example below on West African capitals uses these breaking down methods to estimate gaps due to gender and ethnicity.

Figure 41

*Income Gaps by Sex and Ethnic Group (Compared to the Majority Ethnic Group) in Different West African Economic Capitals in 2002-2003*



Source: PARSTAT 1-2-3 Surveys; Nordman, Robilliard and Roubaud (2011).

The most significant term (0.8) corresponds to the “raw gap” – the most important part, which we’re trying to explain.

Here we have represented the gap between men and women or between ethnic groups, and the difference in revenues is expressed

in a logarithm. As for gaps due to gender, men earn 80% more than women. The dotted histogram represents what remains of the gap once one has controlled for characteristics  $X$ . We have filtered the effects: the explained part has been removed and we’re currently measuring the unexplained

part of the total gap. Obviously, we will have a smaller histogram when we're looking at the gap adjusted for the individual characteristics of men, women or ethnic groups.

We have a tendency to interpret this graph as representing discrimination, but you must understand that it's about an unexplained part. If we look at the ethnic gap, it's almost non-existent, even if we take the "raw" measurement. This gap is even smaller when it's adjusted, because when we take into account the differences in characteristics (education, experience) between workers of minority or majority ethnic groups in these West African capitals, hardly any difference in average income remains.

*Practical exercises start mid-morning and last until the end of the day.*

*The objective is a practical application of the various theoretical points of view and challenges presented by Christophe Jalil Nordman: a calculation on the logarithm of hourly or monthly income as a function of gender or ethnic origin – starting from the treatment of descriptive statistics from the employment survey, participants attempt to identify the dependent variables linked to remuneration in the labour market.*

- *For example: from a regression divided by gender, the workshop highlights certain aspects of the situation in Việt Nam:*
- *Lower yields from education for women;*
- *In contrast to men, an ethnic variable disadvantageous to women – the quality of the adjustment, from the variables introduced, shows that it's possible to account for about 40% of the variance of women's salaries;*
- *For men, the fact of having children under 4 years of age has no effect on*

*income received – significance test of zero coefficients, confidence interval of probability at the 90% threshold. For women, the examination of coefficients and of significance underlines a negative effect on women's income: everything else being equal, taking account of all characteristics (married women, ethnicity, living quarters, make-up of the household, level of education, experience), the more a woman has young children – compared to a childless woman – the lower her income will be; if you compare two women with the same level of characteristics, the one with young children will have a lower salary.*

*Finally, the participants were reminded of certain points before starting the group work looking at data from Vietnamese surveys:*

- *Perspective: emphasis on a comparative approach, between regional analysis and the situation in Việt Nam;*
- *Producing economic and social analysis: the Stata software should aid reflection, and in this sense remains a tool;*
- *The need for assurance that the employment survey would enable them to respond to the issues raised by each group. before any analytical work;*
- *Starting off their reflection by the construction of simple tables based on descriptive statistics, before any complex econometric work.*

## Bibliography

NORDMAN, C.J, A.S. ROBILLIARD. and F. ROUBAUD (2011), "Gender and Ethnic Earnings Gaps in Seven West African Cities", *Labour Economics*, 18, Supplement 1, pp. S132-S145.

## Day 5, Friday 22<sup>nd</sup> July

*The group work started the previous day continues all morning.*

*The exercise is above all centred on methodological issues based on the analysis of the employment situation and incomes, and ethnic and gender discriminations in different regions of Việt Nam, including a comparison at the national level: the mountainous Northern region, the Red River Delta, the Central region, the Highlands region, the Southeast and the Mekong Delta. The statistical results produced during the workshop, and presented below, were discussed at the end of the day. All of this material was used in the reporting-back session on the final day of the summer school - Saturday.*

**Table 37** *Ethnic and Gender Discrimination in Different Regions of Việt Nam (1)*

	Mountainous Northern region	Red River Delta	Central region	Highlands region	Southeast region	Mekong Delta	Việt Nam
Population (%)	14.0	20.4	21.9	4.5	18.3	21.0	100
Rural population (%)	82.2	74.3	79.8	74.9	47.2	79.3	72.7
Primary school (%)	20.2	13.2	21.8	22.3	23.2	40.0	24.0
Higher education (%)	8.7	11.3	10.0	7.2	7.4	4.8	8.1
Ethnic group (%)	48.5	1.0	12.1	36.1	8.5	7.3	14.3
Population aged 15-24 years (%)	19.7	17.6	17.7	19.5	18.1	18.5	18.3
<b>Activity rate (%)</b>	<b>80.8</b>	<b>73.7</b>	<b>74.5</b>	<b>78.9</b>	<b>69.5</b>	<b>74.6</b>	<b>74.5</b>
<i>For women</i>	<i>79.5</i>	<i>72.6</i>	<i>72.5</i>	<i>75.7</i>	<i>62.7</i>	<i>66.7</i>	<i>70.5</i>
<i>For ethnic groups</i>	<i>85.9</i>	<i>82.3</i>	<i>84.7</i>	<i>85.6</i>	<i>72.2</i>	<i>75.2</i>	<i>82.8</i>

Source: Workshop Participants.



**Table 38** *Ethnic and Gender Discrimination in Different Regions of Việt Nam (2)*

	Mountainous Northern region	Red River Delta	Central region	Highlands region	Southeast region	Mekong Delta	Việt Nam
<b>Unemployment rate (%)</b>	1.1	1.7	2.1	1.3	2.7	2.2	2.0
<i>Gap between sexes (man-woman; percentage points)</i>	0.4	0.9	0.4	-0.7	-0.4	-0.7	0.1
<i>Ethnic gap (Kinh-others; percentage points)</i>	1.1	-0.2	2.0	1.3	-0.4	0.4	1.3
<b>Under-employment rate (%)</b>	1.8	6.7	6.0	6.5	2.9	5.6	4.9
<i>Gap between sexes (percentage points)</i>	0.3	-0.1	-0.9	1.2	0.5	-0.2	-0.1
<i>Ethnic gap (percentage points)</i>	1.0	3.8	0.3	-3.7	-1.7	-4.3	1.0
<b>Number of hours worked</b>	48.1	47.5	46.5	44.4	48.5	45.8	47.0
<i>Gap between sexes (percentage points)</i>	0.1	1.3	2.4	0.8	1.0	2.9	1.6
<i>Ethnic gap (percentage points)</i>	0.2	-2.0	2.7	3.1	0.6	-1.5	0.5

Source: Workshop Participants.

**Table 39** *Ethnic and Gender Discrimination in Different Regions of Việt Nam (3)*

	Mountainous Northern region	Red River Delta	Central region	Highlands region	Southeast region	Mekong Delta	Việt Nam
<b>Actual income (in thousands of đồng)</b>	3,820	4,756	4,196	7,546	7,465	5,994	5,358
<i>Women = % men</i>	84.8	74.9	74.7	90.6	83.5	78.8	78.3
<i>Ethnic minorities = % kinh</i>	57.9	65.7	55.5	76.9	84.0	81.7	65.8
<b>Informal employment (%)</b>	89	84	89	90	74	91	86
<i>Gap between sexes (man-woman; percentage points)</i>	-1	-1	-2	-1	1	0	0
<i>Gap between ethnic groups (Kinh-others; percentage points)</i>	-12	-8	-8	-9	-16	-4	-10
<b>Multi-activity (%)</b>	25	24	26	14	5	12	18
<i>Gap between sexes (man-woman; %)</i>	-6	-5	-3	1	1	5	-2

Source: Workshop Participants.

## List of Participants

Surname and first name	Establishment	Field	Research theme	Email
Angelelli Alix	Agence Française de Développement (AFD)	Economics	Operational support and economic analysis	alix.angelelli@sciences-po.org
Đào Quang Bình	Southern Institute of Sustainable Development	Sociology	Social mobility in South Việt Nam	binhdig@gmail.com
Đào Thị Hoàng Mai	Economics Institute of Việt Nam	Economics	Poverty, rural development	maidth@vie.org.vn
Hoàng Phương Mai	Institute of Anthropology	Anthropology	Family relationships	maihp147@gmail.com
Lê Anh Tuấn	Training Institute in Social Sciences	Sociology	Public policy	leanhtuangass@gmail.com
Lê Thị Hồng Hải	Institute of the Family and Gender	Sociology	Care of parents by offspring: gender differentiation	honghai.ifg@gmail.com
Nguyễn Thị Hải Yến	Population Centre of Phú Giáo district, Bình Dương Province	Demography	Gender and development	nguyenthilaiyen83@gmail.com
Nguyễn Thị Thanh Xuyên	Southern Institute of Sustainable Development	Anthropology	Gender and ethnicity	xuyenthanh27@gmail.com
Nguyễn Thị Văn	Institute of Sociology	Sociology	Migration of Vietnamese women in Asian countries	vanlinh57@gmail.com
Nguyễn Thị Yên	General Department for Population and Family Planning	Demography	Gender and ethnicity, Bắc Kạn province	nguyenyenhsph@gmail.com
Phạm Quang Linh	Institute of Anthropology	Development anthropology	Evaluation of social impacts	pqlinh@yahoo.com
Phạm Thị Cẩm Vân	Institute of Anthropology	Anthropology, economics and the environment	Roles of Hmong women in the economic development of households	ptcv_84@yahoo.com
Roeungdeth Chanreasmey	Technology Institute of Cambodia	Economics		reasmey@itc.edu.kh
SAYAVETH Chintala	University of Jean-Moulin Lyon 3, based at the National University of Hà Nội	Law	The protection of women against violence in Laotian law	mam25_ch@yahoo.com
Sous Sinoun	Royal University of Law and Economics (Cambodia)	Law	Issues of gender in Cambodia	sous_sinoun@yahoo.com
Tạ Hữu Dục	Institute of Anthropology	Ethnic minorities, family	Family dynamics among the Tày in Lạng Sơn	taducvdt@yahoo.com
Trần Phương Nguyễn	Southern Institute of Sustainable Development	Languages, cultures	Differentiation of gender in the Cham language	minhphuong2k5@yahoo.com

Surname and first name	Establishment	Field	Research theme	Email
Trần Thanh Thủy	Central Institute of Sustainable Development	Cultures	Ethnic plurality in the Centre of Việt Nam	tranthanhthuy84@gmail.com
Võ Nữ Hạnh Trang	University of Đồng Nai	Cultures	Gender and family culture	vohanhtrang@gmail.com
Vondonedeng Bouabane	University of Jean-Moulin Lyon 3, based at the National University of Hà Nội	Law	Comparative study between Laotian and Vietnamese law	bouabane2006@yahoo.com

Demenet Axel, Cling J.P., Nordman Christophe,  
Razafindrakoto Mireille, Roubaud François.

Ethnic and gender discriminations : methods of  
measurement and breaking down data.

In : Lagrée S. (ed.), Diaz V. (ed.). Social differentiation  
and inequalities : methodological and cross-cutting  
approaches to questions of gender and ethnicity. Paris :  
AFD, 2012, p. 143-193.

(Conférences et Séminaires ; 4). ISSN 2118-3872  
Regional Social Sciences Summer University : Tam Dao  
Summer School Week, 2011/07, Hanoi