Role in the family and trajectory in the labor market:

what we can apprehend from a Brazilian economic retrospective survey

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Abstract:

One of the most dramatic social changes in the twentieth century concerns the women's role, particularly in the labor market and in the family. Both changes are correlated and intertwined in a complex process. The paper examines the economic differences considering the family nucleus ("head" with spouse, and female or male "head" without spouse) and "children" over 18 years old, focusing São Paulo Metropolitan Area (which congregates more than 10% of the Brazilian population) in late 1990's. Labor market states and transitions related to position in the family are investigated. In order to study the trajectories in the labor market, a socio-occupational typology is developed using the "Grade of Membership", a methodology appropriated to fuzzy sets. "Occupational trajectory" is regarded as the combination of successive occupational states and the transitions between them. The results show that women experience much more diversified trajectories comparing to men and have to face "precarious" pathways much more frequently. The household service may play an important role on this, as it is almost entirely a feminine activity. Three groups of socio-economic profiles structure by position in the family are identified: first, "male head" (with or without spouse); second, "female single head" and "female spouse"; and, third, "son over 18 years old" and "daughter over 18 years old". The profiles compositions of "female heads" and "spouses" are very much alike. This suggests possible harder living conditions for families headed by a single woman. Due to the probably higher responsibility of "female heads" towards the family survival, a more stable and secure economic profile should be expected from them.

Introduction

One of the most dramatic social changes in the twentieth century concerns women's roles, particularly in the labor market and in the family. Both changes are correlated and intertwined in a complex process, which has not been fully understood or investigated. In many countries, a serious problem that hinders the examination of the relations between occupational status' transitions and transformations in the family is the unavailability of longitudinal surveys which follow the changes in the labor market and in the family at the same time. Even a longitudinal survey about the transformations in the family alone is frequently not available.

The aim of this paper is to investigate the relationship between economic performance and role in the family. This is done using a retrospective survey about transitions in the labor market and considering the current position in the family. The economic status and transitions of the members of different kinds of family nuclei and of the "children over 18 years old" will be compared. In other words, the "heads of the family"[1] will be segmented in "head with spouse" and "head without spouse", which, in turn, will be separated in female and male single head; after that, the economic performance of (a) male head with spouse, (b) single male head, (c) female head, (d) female spouse, (e) son (older than 18) and (f) daughter (older than 18) will be investigated[2]. These comparisons are made easier by a typology of occupational trajectories that will be developed. A typology is an instrument to organize a certain heterogeneous reality and summarize some of their aspects which are considered to be important. Brazilian labor market is characterized to be very heterogeneous and unstable. In other words, very different kinds of job and a mixture of labor relations coexist in Brazilian labor market and, quite often, the occupational spell is very brief. Another characteristic, this one similar to other countries' labor market, is the increasing proportion of women taking part in the labor force, which means a major change in women's roles in family organization and in society.

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[1] Although it is a very controversial expression, "*chief* of the family" is still used in Brazilian surveys, meaning "reference person to the family", which in turn seems to be not correctly understood in surveys' interviews. In this paper, this specific position in the family will be referred to as "head of the family".

"Trajectory in the labor market" in this study means the combination between successive occupational conditions (i.e., employed / not employed; kind of job, earning's amount, and so on) and transitions an individual goes through. Economic state relates to a position in a certain period and transition recalls a movement between positions and, so, "trajectory" shall comprise both. The word "trajectory" is used instead of the word "path" (or "pathway") because the last one seems to refer to a well delimited track, while "trajectory" resembles a route that is not so clear-cut[3].

The labor market of São Paulo Metropolitan Area (SPMA), Brazil, in April-December, 2001 will be examined. The occupational transitions refer to the period from, approximately, 1995 to 2001. In order to analyze these transitions, a socio-occupational typology will be constructed by applying the Grade of Membership method and considering characteristics of the workers, of the jobs they occupy and/or have occupied and of their transitions between jobs and between labor market status ("employed" or "not employed").

First, this paper presents background information and definition about Brazilian labor market, family arrangement features and SPMA. Secondly, the reasons for a new method to create the trajectories' typology and the method itself are explained. Then, the data basis is presented. Finally, the methodology is applied to SPMA's labor market, the types are described and the situation and trajectories of the family members are shown. At last, some final considerations are made.

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[2] When the family nucleus is composed by both spouses, more than 95% families indicate the *male* spouse as the head. Because of its small number, it won't be investigated separately the economic performance of the female head from a composite nucleus.

[3] A search on the internet revealed that the expression "labor market trajectory" is used very seldom and, when it is, generally by non-English speaking natives. The most comparable usage of "trajectory" seems to be "career trajectory" and "earnings trajectory", the meaning of which is similar to that of "socio-occupational trajectory" in this study. In Brazil, GUIMARÃES (2004) published a book about the *trajetórias de trabalhadores* (trajectories of workers), expression that appears in its title already.

Brazilian labor market and families and São Paulo Metropolitan Area (SPMA)

The Brazilian labor market is very heterogeneous and segmented. The historical process shaped a "very mixed" labor market, in which very different kinds of jobs coexist. Some have higher wages and protection and rights from the law and union contracts, while others only have the basic legal rights and payments near the Minimum Wage, and still some others without the rights ascribed by the law, which don't even pay the Minimum Wage. Additionally there is a high proportion of "self-employed" workers[4]. The "self-employment" sector of the Brazilian labor market itself is very mixed; there are specialized workers that are very well paid and there are workers striving to make any kind of a living. On the other hand, in the employed workers sector not all of the workers have the official document ("Labor Card") signed by the employers that warrant them access to several legal rights[5]. Despite being obliged to sign their employees' card, employers very often elude the law. Another feature of Brazilian labor market (and society) is its large diversity of individual's school attainment, even though school attendance has improved recently and the new cohorts have reached much higher educational level, especially women.

Women have been changing their social role in Brazil and increasing their participation rate in the labor market steadily since at least 1950, despite the low levels until 1970. Although each successive cohort has had a higher proportion of economically active women, this process slowed in the nineties (WAJNMAN and RIOS-NETO, 2000) and men still represent the majority of the labor force (SOARES e IZAKI, 2002). The steep rise on the spouses' labor force participation alone is responsible for 70% of the rise of the female participation rate in Brazil from 1977 to 2001 (SOARES and IZAKI, 2002) and seems to be caused by a "cohort effect" rather than a later entry in the labor market, for example, as

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[4] In order to take into account some differences, researchers of Brazilian labor market call "employment" the labor relation where there is a monthly wage payment, a personal relation and occupational submission, while "(economic) occupation" refers to all kinds of working relations. Consequently, "employed" correspond to those who have an employment relation, and "occupied" to everyone who works on an economic activity. In this sense, a "self-employed" worker would be "occupied" but not "employed".

[5] The employees who have their "Labor Card" assigned by the employers will be called "protected employees" from now on, and the employees who haven't will be called "unprotected employees".

resulting from an "additional worker effect"[6]. In other words, a process of "entering the labor market, then marrying and continuing economically active" (in such order of events) seems to be more important to explain the rise of the wives' labor force participation rate and, consequently, of the women's participation rate. In SPMA, the expansion of the total participation's rate in the 1990's results from the change in women's rate, especially due to the wives, since the masculine rate even declined a little (FIG. 1).

FIGURE 1:

Participation's rates by position in the family and sex (and age, for child) - SPMA - 1990 and 2000
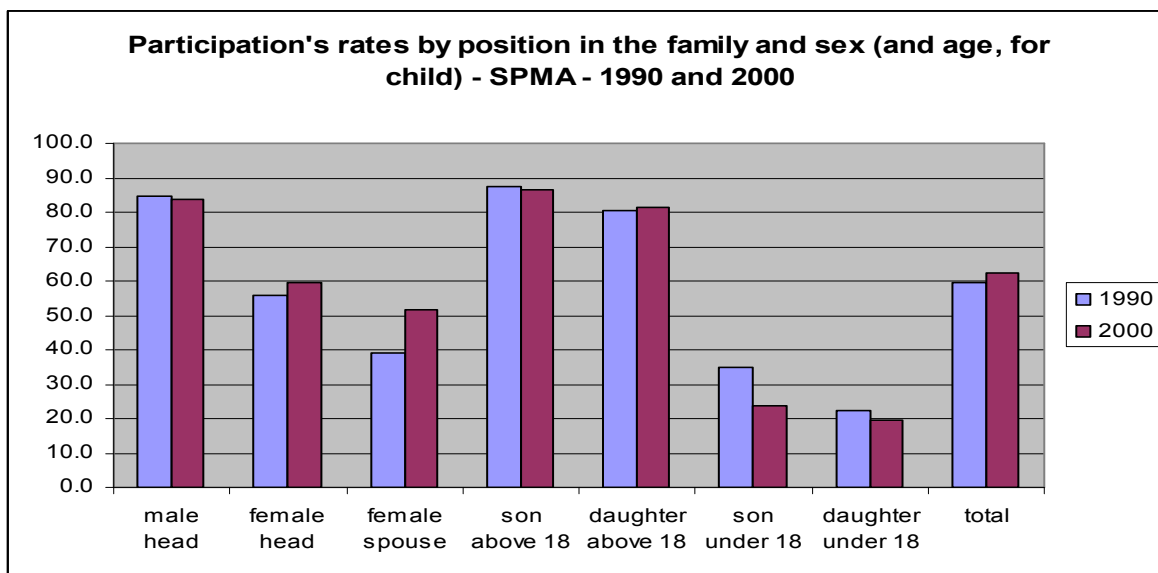
Source: SEADE - Pesquisa de Emprego e Desemprego *apud* MONTALI (2005a, 2005b).
Note: "Total" includes "other relatives" and "non relatives" (like household servant).

Despite the increase in women's participation, they still face hardships in the labor market, compared to men's situation. Unemployment is higher, and wages and payments are lower among women. Considering the occupational structure by sex, it's important to notice that the employment as servants still absorbs a large proportion of the working women in Brazil, 22% in 1995, while only 1% of the working men were servants (WAJNMAN and PERPÉTUO, 1997). Even in SPMA, the most developed Brazilian region, jobs in household services are responsible for 18.7% of the whole feminine economic occupation and only 32.4% of the servants have their Labor Card signed[7]. The "servant's job" is

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[6] Usually, the "additional worker effect" is viewed as the response of another family's member (typically the wife) to the head of the family's unemployment.
[7] These percents result from the author's calculations for the period analyzed (from April to December, 2001) with the data base used in this study (SEADE, 2002).

characterized by low wages, instability and very low prevalence of protected jobs. Besides that, Brazilian women are still responsible for the biggest part of their own household chores, although the wealthier "housewives" can count on their own servants to carry the burden. On the other hand, Brazilian female workers are also concentrated in the public sector, whose jobs tend to be more stable, better paid and with larger rights.

A marked feature of Brazilian labor markets is that their workers' mean occupational spell is very brief. That is, on average, an individual remains for a relatively short time in each job (GONZAGA, 1998, e BRUSCHINI, 2000). The Brazilian labor market can be regarded as structurally unstable from the workers' point of view. Surprisingly and against the evidence for the USA or Great Britain (HAKIM, 1996), there is almost no difference between male's and female's *mean* occupational spell duration (BRUSCHINI, 2000).

In the 1990's, the Brazilian labor market underwent a substantial rise in the unemployment rate, and a decrease of the industrial and more protected, better paid jobs. These intense changes had different impacts upon the workers, depending on their characteristics, such as sex, age, schooling, occupation, experience and position in the family. Families too suffered different impacts depending on their composition and on their members' characteristics given that families can be seen as units that distribute rights and duties and resources of three kinds ("assets", time and money) among their members, especially when living together.

> "The current arrangements and re-arrangements to allocate the family members in the labor market are jointly defined by the economic dynamics and by the family and gender relations dynamics, and they assume specific aspects in the different family types, affected by the composition prevailing in the family life cycle's stage." (MONTALI, 2003, p. 14. *Author's translation.*)

MONTALI (MONTALI, 1998, *apud* MONTALI, LOPES, 2002, p. 23) analyzed SPMA in the 1990's and identified three distinct profiles of the family members' "insertions" in the labor market: 1) male head of the family and son and daughter over 18 years old have higher labor force participation rate and larger proportion of 'population in working age' occupied, of protected jobs, and of jobs in industries; 2) female head and female spouse have intermediate labor force participation rate and employment ratio, and jobs in the

service sector (like servants, shop-attendants, teachers, nurses and so on); and 3) son and daughter under 18 years old have low labor force participation rate and employment ratio, high unemployment rate and large proportion of unprotected jobs. It should be investigated then, what kind of arrangement of the family members' economic performance prevails when trajectories are considered instead of only "insertion" in the labor market.

For Brazilian women, there is an acute tension between family and their economic role. However, this balance has been changing over time as they are increasingly out to work and are reducing the number of children they (and their spouses) give birth to. Since the beginning of the Twentieth Century, the fertility in Brazil has been decreasing, even more rapidly from the mid sixties on (FRIAS and CARVALHO, 1994). The fertility rate fell from around 6 children per woman in mid sixties to 2.2 in 2000 (FRIAS and CARVALHO, 1994, and IBGE). The fertility decline is, at the same time, cause and consequence of the change in women's role in society and possibly the main cause for the altering in the "family arrangements"[8] in Brazil. Other reasons to this altering are the cultural changes relative to the value ascribed to marriage and family, the increase in marriage dissolutions, the population aging and the gains in longevity. Another change is the decrease in the proportion of non-relatives and servants living in another family's household. The main transformations in Brazilian family arrangements are the diminution of its size (by the reduction of the proportion of "children"), the enlargement of the shares of the families with a woman as "head" and of the people living alone and the growth in the proportion of co-living partners (OLIVEIRA and BERQUÓ, 1990, and MEDEIROS and OSÓRIO, 2002). Between 1978 and 1998, the mean household size in Brazil decreased from 4.88 persons to 3.72 (MEDEIROS and OSÓRIO, 2002, p. 13). And between 1977 and 1998, considering only the family nucleus (that is, "head" and eventual spouse), the nuclei with a female head without spouse increased its share from 13.6% to 20.9%, while the nuclei with both spouses decreased theirs from 83.0% to 75.5% and the ones with a male head without spouse kept their share of about 3.5% (MEDEIROS and OSÓRIO, 2001, p. 24). Notwithstanding these changes, the typical family arrangement in Brazil is still the couple with kids, in spite of its relative gradual weakening.

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[8] In this paper, "family arrangement" is considered the group of relatives that live together in a household.

Although Brazilian labor market has been changing slowly over time, it could be said to still be segmented by gender (BRUSCHINI, 2000, and OLIVEIRA, 1998). As long as the female concentration in certain occupations within certain industries or sector persists, under certain labor relations (such as self-employment or unprotected employment), and as long as some social assignments and expectations related to gender, age and family's position resist, one can suppose that, as much as the "insertion" in the labor market, the transitions histories will vary according to gender, age and position in the family.

This study focuses São Paulo Metropolitan Area (SPMA). São Paulo is the largest Brazilian city. In 2000, there were 10.4 million people living there. Its metropolitan area congregated 17.8 million people then, which meant more than 10% of the Brazilian population (169.8 million) (SEADE, 2003), and it still concentrates a great bulk of the Brazilian industrial product and labor force.

The reasons for proposing the Grade of Membership and its description

CLOGG, ELIASON and WAHL (1990) demonstrate that the labor force in the United States, at least around 1980, was characterized by its heterogeneity and its structural transience. Therefore, they propose an approach that necessarily takes into account the dynamism in the labor market.

> "And we must recognize both the heterogeneity in labor-force behavior that actually exists and the dynamism in this behavior. Instability of employment, worker marginality of various kinds, and transience rather than persistence clearly emerges as central characteristics of the contemporary U.S. labor market when this is done. [...] Simple measures of current labor-force participation or unemployment are misleading because they mask the complexity ('heterogeneity') involved and because they imply a temporal persistence that is inconsistent with the evidence." (CLOGG *et al*, 1990, p. 1572.)

Most of the already existing typologies of labor market's transitions try to capture either explicitly or implicitly the workers' *occupational instability*, through categories that basically consider the variables *spell duration* and *changes of status* (CLOGG *et al,* 1990, ALON *et al*, 2000, and WATANABE, BRANDÃO, 1997). GUIMARÃES, SILVA,

FARBELOW (2004) try a different way. GUIMARÃES *et al* (2004), using the same data basis as in this study and a combination of factor and cluster analysis, try to summarize some "common occupational pathways" of the economically occupied workers, of the unemployed and of the inactive individuals. Among the occupied workers the "Ignored Trajectories" are the third more frequent type. These trajectories correspond to so erratic and frequent transitions that no real track is identified. Their high prevalence for the inactive and unemployed groups stands out, suggesting that the risk of unemployment is unequally distributed in the labor force. The examination of the associations between trajectory types and individual profiles by "sex" and "color" for occupied and unemployed workers, controlling for school grade, reveals the following patterns: white men associated with track of protected employment; black and "mixed" men related to very frequent transitions; black and "mixed" women connected with pathway of household services; and white women with no clear association to any trajectory, but near to those of unemployment and/or inactivity. For the authors, these patterns of association, controlling for school attainment, suggest strong effects of racial and sexual prejudice and discrimination upon the occupational pathways.

The typology that will be developed and used here does not intend to capture solely the occupational instability, so will not consider only the variables "time" in each status and "transitions" between status. The typology will take into account several other characteristics too, those of the individual and those of his/her occupations and labor market's transitions. This typology is not analogous with any other that already exists. The differences between this classification and the others refer to what will be classified, the variables that will be considered and the method to create the typology. What will be looked for is if there are different workers' "insertion-transition" profiles, given by the jobs', the transitions' and the individuals' characteristics. As long as occupational characteristics and individual attributes are considered to build up the typology, the economic trajectories will be related at the same time to the corresponding individual profile. In fact a socio-occupational typology will be obtained. It's assumed that there is a correlation between individuals' characteristics (i.e. gender, age, educational level, color/race etc.) and their economic performance.

The method of creating the typology departs from the hypothesis that each individual's trajectory may not correspond totally and exclusively to one profile. In other words, the individuals' trajectories aren't all adjusted to very well defined sets ("*crispy sets*") and, rather, compound "*fuzzy sets*". Instead of pertaining exactly to one type, each trajectory may have *grades of membership* to different types. Fuzzy sets theory deals better with heterogeneity because it considers that an element may pertain, in a higher or lower level, to more than one set. The diversity of possible trajectories, considering each status' spell, status' changes, jobs, kinds of labor relation etc. or, in other words, the *heterogeneity* prevailing in Brazilian society and labor market supports this method's election.

The Grade of Membership – GoM will be used to help to create the typology (MANTON, WOODBURY and TOLLEY, 1994). This methodology assumes the identification among the set's elements of two or more very well defined profiles, which are called "extreme profiles" and to which the other elements (in this case, the trajectories) will be related through "grades of membership" based on their attributes. When certain element's characteristics equal all of an extreme profile's, its grade of membership to this profile is 100%, and 0% to the other(s). Nevertheless, there will be elements with characteristics from different extreme profiles and, in this case, these elements may either be closer to one or another extreme profile or be half-way from two or more extreme profiles.

The statistical modeling that applies GoM methodology identifies the extreme profiles from the elements' characteristics in the data set and provides each element's grades of membership to them. That is, it establishes a grade of membership score belonging to each element from the fuzzy set, $\mathbf{g}_{ik}$, which indicates the grade of membership of element i to the k extreme profile, or, in other words, its "affiliation intensity" to the extreme profile k. So,

$0 \leq \mathbf{g}_{ik} \leq 1$ for each i and each k; and

$\sum \mathbf{g}_{ik} = 1$ for each i .

As far as the elements' grades of membership compound a fuzzy set, the more variables that are introduced into the modeling, the better the set will be defined.

The probability of an answer ℓ to the jth question from the element with k^{th} extreme profile is given by $\lambda_{kj\ell}$, with

$0 \leq \lambda_{kj\ell} \leq 1$ for each k, j and ℓ ; and

$\sum \lambda_{kj\ell} = 1$ for each k and j .

The probability of an answer ℓ to the jth question from the element i, conditioned by its grade of membership's score, g_{ik}, will be given by

$$\Pr (Y_{ij\ell} = 1.0) = \sum_{k} g_{ik} \lambda_{kj\ell} .$$

whose coefficients are estimated by the following maximum likelihood function:

$$L_{(Y)} = \prod_{i} \prod_{j} \prod_{\ell} (\sum g_{ik} \lambda_{kj\ell}) .$$

Considering the limits imposed by theoretical references about the matter focused (in this case, labor market), GoM is flexible enough to allow several alternative tests to identify the more appropriated extreme profiles' number. This will depend on the investigation's purposes, the investigator's knowledge, ability and, at last, decision. On account of the method's flexibility and of the relatively large variable's diversity on the data basis, the process of creating the profiles admits and presupposes some tests until the adequate profiles are identified. Adequate profiles shall be understood as those which distinguish the trajectories better and permit the best exploration.

The data basis offers two characteristics' sections: personal attributes and occupational characteristics[9]. The jobs' and economic transitions' characteristics that will be brought into the modeling are: current occupational status, current and preceding occupational positions (protected worker, unprotected worker, self-occupied, employer and so on), current and

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[9] To GoM's methodology the parsimony's rule doesn't prevail. It's the other way round. The more variables put into the model, the better it will be specified.

preceding activity sectors, work related earnings, type/kind of the firm, number of occupational spells, number of non-occupational spells, proportion of occupational span related to total span informed, total span informed. The personal attributes are: sex, age, schooling, race/color, migration to SPMA, family size, proportion of (economically) occupied persons in the family, head of the family's schooling, current family income *per capita*[10], presence of child younger than 7 years old, occurrence of unemployed relative (living in the same household) and position in the family (head, spouse, child, other relative, non-relative).

GoM's methodology requires the use of string variables only. So, the continuous variables (in this case, time, money and proportions) have been categorized into quarter classes. That is, for each variable, the response values have been ordered among the 25% lowest; the 25% above that and lower than the median; the 25% immediately above the median; and the 25% highest. The lowest values are in the first quarter and the highest, in the last one.

Data basis

The data basis for the study is the *Pesquisa de Mobilidade Ocupacional* – PMO (Occupational Mobility Survey), a survey developed by Centro de Estudos da Metrópole (CEM) - CEBRAP (a non governmental research centre) and conducted by Fundação SEADE (the São Paulo State's statistical bureau), from April to December, 2001, as a supplementary questionnaire to the regular *Pesquisa de Emprego e Desemprego* – PED (Employment and Unemployment Survey) in SPMA[11]. The PMO questionnaire was applied to the same individuals who were interviewed by the PED. So, along with the data

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[10] The following types of earnings are collected by the PED questionnaire: payment for the main job; payment for the secondary job; payment for eventual job; pension; and unemployment compensation. To avoid loosing information, the family income was considered missing when one of the family's member, if occupied (except as "family worker"), hadn't declared the amount of the payment for the main job. Doing so, the data of family income isn't lost when the other types of earnings of each family member were not declared. Notice that a person who works on a family business (the so-called "family worker") very often declares zero income.
[11] PMO was financially supported by FAPESP (São Paulo State's research fund). USP (State University of São Paulo) cooperated to its accomplishment. PED is a regular labor market survey whose methodology was developed together by Fundação SEADE and DIEESE (an investigation and advising institute to Brazilian unions).

from the specific PMO questionnaire, data from the household members' sample usually gathered by the regular PED questionnaire are available.

The PED questionnaire delivers the data about the personal characteristics (including the family's ones) and the individual's current situation in the labor market. Besides, for the currently unemployed individuals who have had a job before, it informs about the last working experience. The PMO is built up with retrospective questions about the individual's past performance in the labor market. Besides people who had never been in the labor force, some workers didn't answer the PMO questionnaire: those under 16 years old at the moment of the survey, those who had been for at least eight years at the same job, and those whose current occupational situation was difficult to define. The individuals who answered the questions from the PMO were: workers who have been in the current job for less than eight years long, people who are not in the labor force but who were in the past, and unemployed workers.

The questions about the transitions in the labor market refer basically to previous jobs (concerning spells' number, duration and characteristics) and to spells between them. Therefore, a first feature of the survey is that it provides information on spells of occupation and of non-occupation. It doesn't distinguish between "period out of the labor force" (i.e., spell of inactivity) and "period out of a job but looking for one" (i.e., spell of unemployment).

A second feature of the survey is that the spells' number and duration vary a lot from person to person interviewed. The questionnaire asks from the current situation back into the past. First, it asks about the previous job, and, then, about the one before that, if, and only if, this had lasted until after January 1, 1994. But, for instance, for those who are at the current job for at least eight years, the data report only on the current spell duration (besides his/her job characteristics). Because of the survey's structure, the spells' number (of occupation and non-occupation) and the spells' durations are much diversified, as can be seen in TAB. 1 below.

TABLE 1 – Possible numbers of spells by PMO occupational category

PED's regular questionnaire's category[1]	Spells' number[2]	Spells
work at the same job for 8 years or longer	one	the current spell (of occupation)
out of the labor force for 8 years or longer	one	the current spell (of non-occupation)
work at the same job for until 8 years	one	only the current spell of occupation, if he/she hadn't worked before
	three	two spells of occupation and one of non-occupation, if he/she had worked only once before or if he/she had been in the previous job since January 1994
	five	three spells of occupation and two of non-occupation, if he/she had had two jobs before and the end of the first one was after January 1994
out of the labor force until 8 years (with a previous job experience)	two	one spell of occupation and one of non-occupation, if he/she had had a job that ended after January 1994
	four	two spells of occupation and two of non-occupation, if he/she had had two jobs since January 1994
unemployed for until 8 years who has previous experience of work	two	one spell of occupation and one of non-occupation, if he/she had been only in one job since January 1994
	four	two spells of occupation and two of non-occupation, if he/she had had two jobs since January 1994
unemployed for 8 years or longer	two	the current spell (of non-occupation) and the previous one (of the last job)
unemployed who hasn't worked yet	no one[3]	-----

(1) – The PED's regular questionnaire reports on the current (for the moment of the survey) status as "occupied", "unemployed" or "economically inactive", while the PMO's questionnaire doesn't distinguish between "unemployment" and "inactivity" for previous periods, status denominated here as "non-occupation".

(2) – Number of spell of occupation and/or non-occupation.

(3) – Regarding the "unemployed workers who hasn't worked yet", the survey reports just on the spell of *unemployment* (as a result of the regular questionnaire – PED), but spell of unemployment is conceptually different from spell of *non-occupation* informed for the other occupational categories.

Note: The number of spells cited in the TAB. 1 above shall be a little different if the worker has changed jobs without going through a spell of non-occupation or if she/he accumulated two jobs at the same time but one of them lasted longer.

The data basis offers information about 45,021 women and 41,451 men, amounting to 86,472 persons, distributed into ten categories from the PMO's questionnaire, used to filter off those who would respond the questions concerning past occupational experience. The individuals currently in the labor force were selected from that total of 86,472 persons. By doing so, the data from those under ten years old (14,411 persons) and the economically inactive (13,188 women and 5,166 men) were discarded. Besides, people from ten to fifteen years old (4,471 women and 4,514 men) didn't answer the PMO questionnaire, because they didn't have time to gather occupational experience, even if they were currently in the labor market and, in this case, were interviewed by the PED survey. Lastly, the unemployed with no previous job experience (516 women and 317 men) were also excluded from the study. After disregarding all these cases, the investigation focused on 43,128 persons (without weighting), 45.3% of which were women and 54.7%, men (TAB. 2).

TABLE 2:
Absolute and relative distribution of persons by sex and occupational status according to the PMO classifying question – SPMA – Apr-Dec.2001

Occupational status according to the classifying question[(1)]	**Sex**				**total**	
	female		**male**			
	nº	%	nº	%	nº	%
occupied for 8 or more years	3377	17.30	4935	20.91	8312	19.27
occupied for less than 8 years	12589	64.49	15600	66.08	28189	65.36
unemployed for 8 or more years	221	1.13	53	0.22	274	0.64
unempl for less than 8 years ex-employed	2987	15.30	2383	10.09	5370	12.45
unempl for less than 8 years ex-others	348	1.78	635	2.69	983	2.28
Total	19522	100.00	23606	100.00	43128	100.00

Source: *Pesquisa de Mobilidade Ocupacional* – CEPID-FAPESP / CEM-CEBRAP / SEADE / DIEESE / SERT / USP
(1) – The classifying question filters those who answer the PMO questionnaire from those who don't.
Note: Absolute values without weighting

The biggest group, for persons of both sexes, corresponds to the 'occupied for less than eight years' in the current job. Considering only the occupied individuals (i.e., excluding the unemployed), merely 24% of the men and 21% of the women accumulated more than eight years at the same job, what points to high job instability.

In SPMA, from April to December of 2001, the female labor force participation rate was lower, and the unemployment rate, higher than the male rates (TAB. 3).

TABLE 3:
Labor force participation and Unemployment Rate by sex - SPMA - Apr-Dec.2001

Rates	Sex		
	female	male	total
Participation Rate	54.30	72.68	63.00
Unemployment Rate	21.01	14.91	17.68

Source: PED-RMSP - SEADE / DIEESE
Note: Rates calculated with weighted values for persons over ten years old.

The SPMA's occupational structure from April to December 2001 shows that the most frequent position is "private sector employee with signed card" to both men and women, but a little less concentrated for women (TAB. 4)[12]. Concerning women, the second most frequent position is "household servant", which is a chiefly feminine position.

TABLE 4:
Absolute and relative occupational distribution considering the occupation's position by sex - SPMA - Apr-Dec.2001

Occupational position	Sex					
	female		male		total	
	n°	%	n°	%	n°	%
Protected private employee	5284	34.62	8962	45.31	14246	40.66
Unprotected private employee	1832	12.00	3028	15.31	4860	13.87
Public sector employee	1672	10.95	1197	6.05	2869	8.19
Employee who doesn't know	9[*]	0.06[*]	8[*]	0.04[*]	17[*]	0.05[*]
Self-employee to people	1683	11.03	2864	14.48	4547	12.98
Self-employee to firms	1011	6.62	1924	9.73	2935	8.38
Employer	439	2.88	1213	6.13	1652	4.71
Servant employed per month	2230	14.61	120[*]	0.61[*]	2350	6.71
Servant contracted per day	617	4.04	3[*]	0.02[*]	620	1.77
Family worker	315	2.06	227	1.15	542	1.55
Others	171[*]	1.12[*]	232	1.17	403	1.15
Total	15263	100.00	19778	100.00	35041	100.00

Source: PED-RMSP - SEADE / DIEESE
(*) Non-representative values.
Note: Weighted values.

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[12] It's very difficult to translate the titles given to each occupational position in Brazil, especially because they are not simply names, but concepts. That is, the titles are already a way of understanding Brazilian labor market. For example, some scholars call the "employee without assigned card" as "informal employee", but there is a long discussion about what is the informal sector in Brazil; others call it "illegal employment". "Occupational position" refers to the types of labor relations are established between the worker and her/his employer.

It should be noticed that economic occupations on household services and on the public sector are very important to women and that those occupations stand in the extreme points of the occupational spell durations' rank (FIG. 2). Considering the current occupation and both sexes, the three most durable occupations' position are "others" (that correspond basically to "self-employed college graduated professionals", like doctors, dentists and so on), "public sector's employees" and "employer".

FIGURE 2:
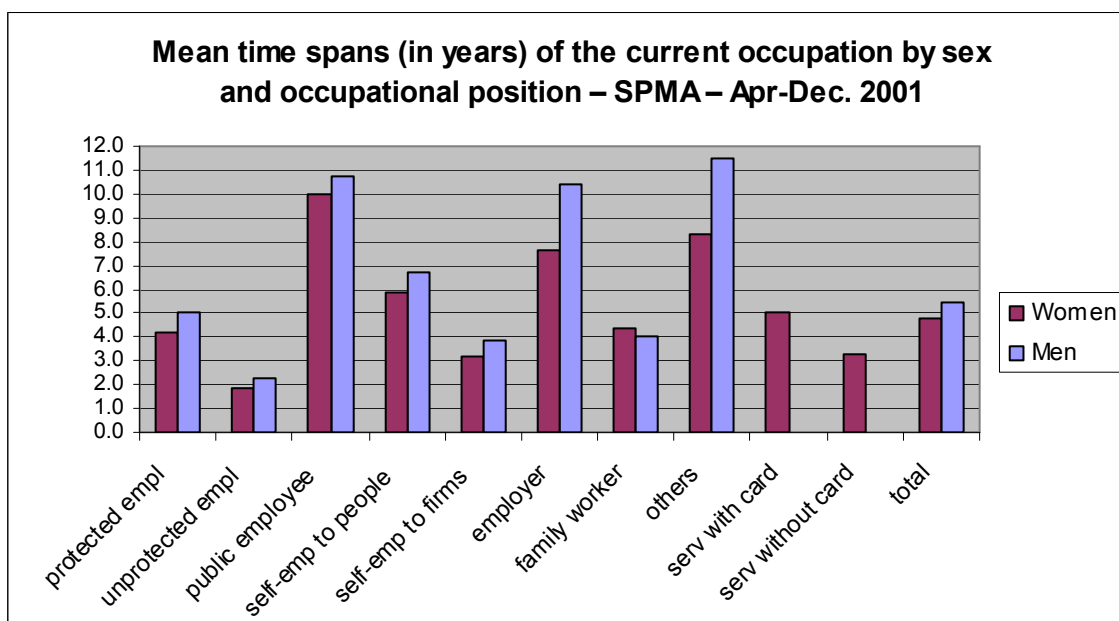
Source: *Pesquisa de Emprego e Desemprego* –SEADE / DIEESE – Author's calculations.

Women accumulate lower time spans compared to men on the same occupation's positions, with the only exception of "family worker". In mean terms, men have been surviving for 5.5 years at the same job and women, for 4.8 years in SPMA. This result differs from those of BRUSCHINI (2000), which found almost no difference between women's and men's occupational spell length in Brazil. Even though there is not such a big disparity between women's and men's average occupational time span, the differences are large in two out of the three longer occupational positions. In Great Britain, in 1990, the average current occupation's durations were 9.9 years for men and 6.4 years for women (BURGESS and REES, 1994, *apud* HAKIM, 1996). Comparing to Great Britain, the gap concerning men's and women's mean job duration in SPMA is shorter and the mean occupational spells for both tend to be much briefer.

The typology, the trajectories and the family members

The "Extreme Profiles"

The final model chosen to obtain the typology asked for three extreme profiles for economically active women and men at the same time[13]. Among the variables taken into account are "sex" and "position in the family". Therefore, if those attributes are discriminating to the extreme profiles, an association between certain trajectory's profile and the individual "sex" or "position in the family" will be discovered.

The profile's description is indicated by the examination of the estimated probabilities (lambdas), for each profile, of each response to each variable, taking as reference the frequency of the responses in the sample. In order to describe the profiles, a cut-point of 1.2 in the relation between the lambda and the respective frequency was considered. This means that, when the result of "lambda / frequency" to a specific response is larger than 1.2, the profile in which it happens is understood to be characterized by a larger concentration of that response to that variable comparing to the sample[14].

The estimated probabilities (lambdas) and frequencies by response and profile are shown in TABLE 1 of the Appendix (TABLE 1 – A) [15]. The last column ("Lambda / Freq") is

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[13] In order to identify the most appropriated model, several trials through different variables' combinations and categorizations were attempted to build up the profiles and the corresponding scores. Among them, there were attempts with two and four extreme profiles; one considering women and men separately; other including the economically inactive also; other in two levels (the occupational characteristics at one level and the personal and family features at another).

[14] Notice that the cut point of 1.2 intends only to subsidize the extreme profile's *description*, because the scores don't depend upon the profile's description, despite depending upon the profiles built up by the statistical program. The investigation of the variable's distribution among the elements separated by profiles allows testing whether the profile's description is adequate or not. As ten profiles (three pure and seven mixed) were obtained and there are 25 variables, 250 graphs (each one with a variable distribution by profile) were analyzed.

[15] The statistical program used to process the GoM model was the version 3.4, developed in the Epidemiology and Public Health Department of the Yale University, in the USA, by Burt Singer and Peter Charpentier, and adapted to the Unix by Rafael Kelles Vieira Laje, system engineer at Sun Microsystems. The random method was defined to set the initial probabilities (from which the iterations depart and proceed until it maximizes the likelihood) and the initial scores' values were given by the default method. Instability on the results wasn't identified, probably because of the large number of elements and variables.

divided in three smaller columns, corresponding to each profile, and displays shadowed cells in which the relation 'lambda / frequency' is larger than 1.2 and, therefore, indicate characteristic of the corresponding profile. Based upon the shadowed cells, the three extreme profiles were characterized and denominated. It should be noticed that the profiles' identification proceeds from an evaluation of each response's probability independently. Each extreme profile congregates the relatively more probable characteristics associated to it. Therefore, an element that is totally associated to an extreme profile does not necessarily carry all the predominant attributes described in the profile.

The three profiles' depiction appears in TAB. 5 below.

TABLE 5 – Extreme Profiles' Description according to higher probabilities of the responses to the variables

(continues)

Variables	Profiles		
	1	**2**	**3**
sex	women	sex doesn't distinguish	sex doesn't distinguish
inst2[1]	little or median schooling: with no schooling, incomplete first grade or incomplete second grade	median-high schooling: complete second grade or incomplete college grade	high schooling: complete college grade
fxet	teenagers: 16 to 19 years old	young adults: 20 to 29 years old	older adults: 40 years old and more
cor	black and *pardo*[2]	"color" doesn't distinguish	"color" doesn't distinguish
migr10	immigrants for 10 years or longer	immigrants for less than 10 years	"immigration condition" doesn't distinguish
tfam	large families: 9 or more members, 8, 7 or 6 members	"family size" doesn't distinguish	"family size" doesn't distinguish
instc	head of the family without schooling or with incomplete first grade	head of the family with median schooling: incomplete second grade	head of the family with high schooling: complete or incomplete college grade
psfam	position in the family: not relative, spouse or other relative	position in the family: child	position in the family: head
sitocr	occupational status: unemployed for less than 8 years ex-employed, unemployed for 8 years or longer, or unemployed for less than 8 years ex-other	occupational status: occupied for less than 8 years	occupational status: occupied for 8 years or longer

TABLE 5 – Extreme Profiles' Description according to higher probabilities of the responses to the variables

Variables	Profiles		
	1	**2**	**3**
epioc	2 spells of occupation informed	3 or 2 spells of occupation informed	1 spell of occupation informed
epids	2 or 1 spell of non-occupation informed	1 or 2 spells of non-occupation informed	no spell of non-occupation informed
pos1	position in current occupation: household servant or doesn't apply (unemployed)	position in current occupation: employee with labor card or without labor card	position in current occupation: others, public sector employee, employer, family worker or self-employed
pdio	position in last occupation: household servant or self-employed	position in last occupation: other, employed or self-employed	position in last occupation: doesn't apply
pos3	position in before last occupation: household servant, employee without card, without declaration, self-employed or public sector employee	position in before last occupation: employee with card, others, public sector employee, self-employed, employee without card or without declaration	position in before last occupation: doesn't apply
ram2	current sector of activity: household services or doesn't apply (unemployed)	current sector of activity: construction, industry or commerce	current sector of activity: services
rdio	last sector of activity: household services	last sector of activity: others, commerce, services, industry or construction	last sector of activity: doesn't apply
ram3	before last sector of activity: all of them (i.e., household services, without declaration, construction, services, others, commerce or industry)	before last sector of activity: others, services, industry, commerce, construction or without declaration	before last sector of activity: doesn't apply
qtott	low proportion of 'occupation time span / total time span': first quarter	median proportions of 'occupation time span / total time span': third or second quarter	high proportion of 'occupation time span / total time span': fourth quarter
qtt	low total time span: first quarter	median-low total time span: second quarter	high or median-high total time span: fourth or third quarter
qpof	low proportion of 'occupied persons' in the family: first quarter	high or median-high proportion of 'occupied persons' in the family: fourth or third quarter	high proportion of 'occupied persons' in the family: fourth quarter
qrbtpr	labor income doesn't apply (unemployed) or low labor income: first quarter	median labor income: second or third quarter	high labor income (fourth quarter) or missing

TABLE 5 – Extreme Profiles' Description according to higher probabilities of the responses to the variables

(conclusion)

Variables	Profiles		
	1	**2**	**3**
tamemp	work at another one's household or 'type of work's place' doesn't apply (unemployed)	doesn't know 'type of work's place' or work at firms with 3 or more employees	work at public institution or alone or with relatives / associates / at firms till 2 employees
tdsf	have unemployed relative	"unemployed relative" doesn't distinguish	"unemployed relative" doesn't distinguish
iccf	have child under 7 years old in the family	"presence of child under 7 years old in the family" doesn't distinguish	"presence of child under 7 years old in the family" doesn't distinguish
qrfc	low family income *per capita*: first quarter	median family income *per capita*: third or second quarter	high family income *per capita* (fourth quarter) or missing

(1) In Brazil, there are three school's grades: first (or fundamental) grade, with eight years; second (or median) grade, with three or four years; and college (or superior grade), with, at least, three years.
(2) *Pardo* is the Brazilian surveys' denomination to the mixture of white and black of a person's "color". From now on, *pardo* people will be referred to as "mixed" people.
Note: When there is more than one response corresponding to one variable concerning one profile, the responses are cited in a rank of decreasing probability.

Identifying and analyzing the profiles

The profiles were identified by means of the respective more probable characteristics comparing to the sample. The Extreme Profile number one was called "Precarious Trajectory", since the following more probable characteristics distinguish the individuals whose attributes and performance corresponds to it: being unemployed or household servant, have very low schooling and be in a family with several vulnerability's indicators (big families, with an unemployed relative, small proportion of occupied members, low family income *per capita* and head of the family with low schooling). The number of spells of occupation and non-occupation and the time spans (total and of the occupational spells) suggest that the spells of occupation don't last long and/or the spells of non-occupation are long. Besides, other characteristics (like being very young, black plus *mixed* people, recent immigrants) indicate hard living and working conditions. Being woman and spouse distinguish this profile in a probabilistic way too.

As to the Profile number two, it was labeled "Profile of Unstable Trajectory", since a lot of characteristics associated to it recall occupational instability, like the classification as occupied for less than eight years, the number of spells of occupation (two or three) and of non-occupation (one or two), the duration's class of the occupational spell (median quarters) and of the total time informed (below median). The more probable occupation's positions in this profile are protected and unprotected employees, and the labor income is median. The school grade is relatively high and the individuals have a large chance to be "child" in their family and young adults. As to the family, the probabilities show that the family income shall be median, the proportion of occupied members relatively elevated and that the head has achieved median schooling. Being woman or man doesn't distinguish, even though the response "male" almost reached the cut point of 1.2 (see TAB. 1 – A).

The Profile number three was identified as "Profile of Secure Trajectory" because its probable characteristics reveal better conditions of living and working. This can be seen on the tendency to occupy long lasting jobs, to accomplish high levels of schooling and of family and labor income[16]. The elevated school grade of the head of the family and the large proportion of occupied family members are also signs to the better working and living conditions. They tend to be "other" as to the occupation's position[17], or public sector employee, employer, family worker or self-employed. The fact that only the services sector is associated to this profile calls attention. The individuals in this profile tend to be much older and head of the family, but several other characteristics don't distinguish this profile, as "sex", "color", "family's size".

TAB. 6 presents the proportions of the trajectories which have full grade of membership to one of the three Extreme Profiles ($g_k = 1$).

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[16] The non-declaring of earnings is more frequent among better paid workers. The missing data about income by occupational position was investigated and was found that the positions with shares of non-declaring above average were, in decreasing order: "employer", "others", "employee doesn't know", "self-employed to people" and "self-employed to firms". With the exception of the worker that ignores his/her labor relation ("employee doesn't know"), these categories are those whose earnings fluctuate (depending on the number of clients in certain period, for example). The first two, "employer" and "others", get the higher payments for their work. Surprisingly, the "household servants contracted per day", who go between self-employment and employment, display the *lowest* proportion of missing data. Maybe that happens because they ought to know how much money they receive to make a living since they make so little money.

[17] 90% of "others" as 'current occupational position' are "college grade self-employed professionals".

TABLE 6:
Relative distribution of the trajectories equal to the
Extreme Profiles 1 (g_1), 2 (g_2) e 3 (g_3) by sex (%)

$g_k = 1$	Trajectory	female	male	total
$g_1 = 1$	Precarious	14.48	8.98	11.47
$g_2 = 1$	Unstable	17.78	28.67	23.73
$g_3 = 1$	Secure	14.45	18.53	16.68
total $g_k = 1$	---	46.71	56.18	51.89

Source: Author's calculations.
Note: Weighed data.

The "Profile of Precarious Trajectories" is much more important to women than to men, while the "Unstable" is the opposite and the "Secure" is more balanced between both genders. The sum of individuals that have trajectories totally identified to one of the three profiles equal 51.89% of the sample. This means that 48.11% of them correspond to mixed types in a larger or smaller degree.

In very restricted terms, only elements with *total* grade of membership to a certain Extreme Profile ($g_k = 1$) could be classified as a pure type. Every time the grade of membership is lesser than one ($g_k < 1$), the element's characteristics put it under the influence of some other Extreme Profile, even if very small, what hinders the element from being seen as belonging to the pure type.

However, the final typology presupposes a much more "gradualist" approach to the grades of membership. The identification of the pure types and mixed types goes far beyond the sole recognition of "entire membership" to a profile ($g_k = 1$) or not ($g_k < 1$). The trajectory in which prevail the characteristics of a certain profile in a large extent is considered to be a "pure type". The trajectories which share characteristics from different profiles correspond to "mixed profiles". According to the condition applied in this investigation, the mixed profiles display predominance of a specific profile's characteristics combined to a still relevant amount of other profile's characteristics. In the nomenclature adopted in this study, a "pure type" (or "pure profile") is set against a "mixed type (or profile)"; and "pure

profile" does not confound itself with "extreme profile". The elements from a "pure type" can show a score different from one, while those from the extreme profile can only assume full score of pertaining to it[18].

The TAB. 7 brings the criteria employed to obtain the pure and mixed types.

TABLE 7 – Criteria to classify the trajectories among the pure and mixed types

1) The trajectory of the individual i is considered to belong to the pure profile m if it has the following grades of membership g to the extreme profiles m, n and o:

a) $g_{im} \geq 0.75$; or

b) $0.50 < g_{im} < 0.75$, since $g_{in} \leq 0.25$ and $g_{io} \leq 0.25$.

2) The trajectory of the individual i is considered to belong to the mixed profile of m with n (in which the m's characteristics prevail) if its grades of membership g to the profiles m and n are:

$0.50 < g_{im} \leq 0.75$, since $0.25 \leq g_{in} < 0.50$.

3) The mixed without predominance trajectory has the following grades of membership g:

a) $g_{im} < 0.5$ and $g_{in} < 0.5$ and $g_{io} < 0.5$; or

b) ($g_{im} = 0.5$ and $g_{in} = 0.5$) or ($g_{im} = 0.5$ and $g_{io} = 0.5$) or ($g_{in} = 0.5$ and $g_{io} = 0.5$).

The TAB. 8 exhibits the trajectories' distribution among the pure types – in bold letters – and mixed types discriminated by sex and total. The name of the mixed trajectories indicates, first, the predominant profile and, next, the secondary[19].

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[18] In other studies which apply GoM, the expressions "extreme profile" and "pure profile" are interchangeable and used as synonyms.

[19] For example, in the "Mixed Precarious and Unstable" Trajectories, characteristics of the "Precarious" profile predominates, but there are also some relevant characteristics from the "Unstable" profile.

TABLE 8:
Relative distribution of the trajectories among the pure and mixed types, by sex (%)

Profiles	female	male	total
mixed without predominance	2.11	0.73	1.35
pecarious trajectory	22.25	12.36	16.85
mixed precarious and unstable	5.41	0.73	2.85
mixed precarious and secure	2.38	0.20	1.19
mixed unstable and precarious	4.27	0.96	2.46
unstable trajectory	26.87	45.18	36.88
mixed unstable and secure	6.63	8.93	7.89
mixed secure and precarious	3.40	0.39	1.75
mixed secure and unstable	6.39	6.87	6.66
secure trajectory	20.29	23.64	22.12
total	100.00	100.00	100.00

Source: Author's calculations.
Note: Weighed data.

The three pure types are very representative and absorb something between 70% and 80% of the individuals. The most frequent profile, for both women and men, is that of "Unstable Trajectories", which is much more important for men, however. Women and men show no big difference in the share of "Secure Trajectories", but this cannot be said about the "Precarious Trajectories", which are much more prevalent among women.

The data regarding all kinds of trajectories by gender bring about two important conclusions. First, the "Precarious Trajectories" (pure and mixed) are much more prevalent among women, demonstrating that they are affected by the critical socio-occupational conditions in a stronger way. And, second, women altogether experience a wider rank of trajectories' types. This wider diversity of occupational insertions and transitions among women, comparatively to men, is probably related to the more unstable pattern of economic activity of the women's cohorts along time (according to WAJNMAN, 1995, and OLIVEIRA, RIOS-NETO, 2004), to their more frequent transitions between status and positions in the labor market and also to the importance of household services to them.

The profiles with characteristics from "Precarious Trajectories", as main or secondary type, are basically feminine (FIG. 3).

FIGURE 3:

Profiles' composition by gender (left scale) and individiuals' number by profile (right scale)
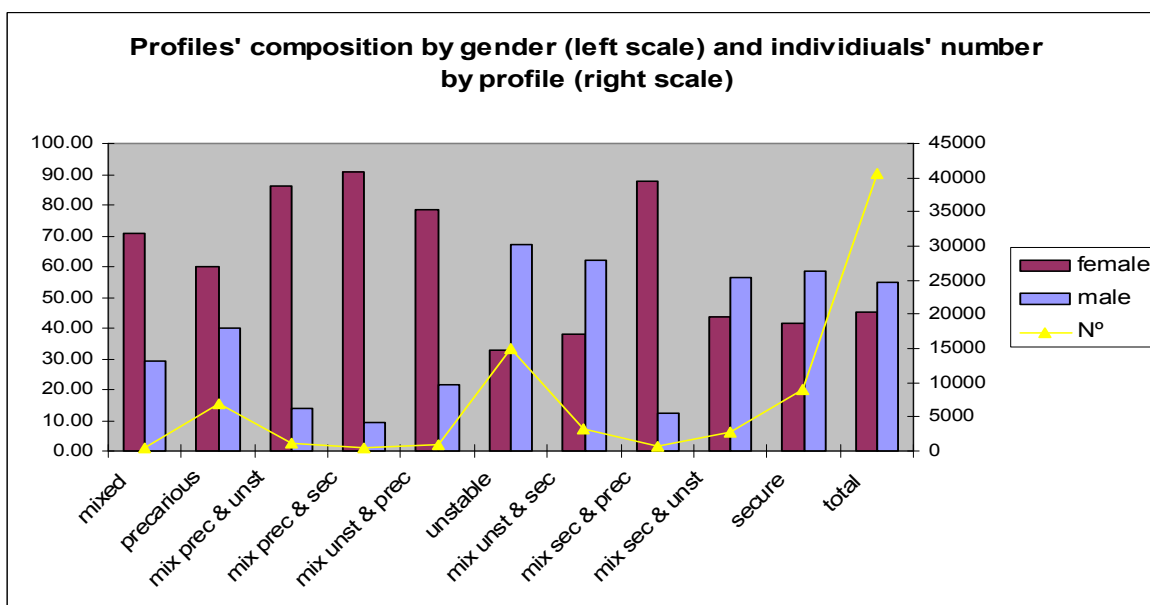
Source: Author's calculations.
Note: Weighted data.

Nothing less than 37.7% of all women in the labor force suffer the influence from the "Precarious", contrasting to 14.6% of the men (TAB. 8 and FIG. 3). In other words, even a lot of women whose trajectories don't belong to the pure type "Precarious" carry remarkable characteristics from it.

Other studies found more adverse transitions in the labor market among women as well. CLOGG, ELIASON and WAHL (1990) concluded that, considering women with past or current experience in the labor force, 43.8% were stable and 56.2% unstable, while 63.4% of the men were stable and 36.6% unstable. GUIMARÃES (2004) reveals that the chance to entry in a "pathway of exclusion" is higher to a woman dismissed from an industrial firm than to a man (48.5% of the cases against 36.8%).

According to GUIMARÃES *et al* (2004), the typical kinds of association between trajectories and individual attributes, controlling for schooling, suggest strong effects of prejudices and sexual and racial discrimination upon the occupational route:

> "We can assert that women go through routes which are strongly associated to the precarious characteristics, because the typical feminine trajectories are those given less value by the labor market and/or those most undesirable on the social perspective: those

of the household servants and unemployed."*[and]* "(...) black and mixed men and women move through precarious and/or socially stigmatized spaces in the labor market." (GUIMARÃES *et al*, 2004, p. 19 and 23. *Author's translation*.)

Also the "Profile of Mixed without Predominance Trajectory" is chiefly feminine. Comparing to the sample, all profiles which concentrate more women carry a larger proportion of 'black and mixed' and of 'recent immigrants' (in this case, with two exceptions among the ten profiles) as well.

As already emphasized, the mixed profiles display characteristics from the predominant profile as well as from the secondary one. The combination of the "Precarious" Profile in the secondary position to another extreme profile ("Secure" or "Unstable") tend to, comparing to the pure profile, increase the presence of women, of black and *mixed* persons, of recent immigrants, of spouses and to decrease the schooling level, the occupational time span and the work related earnings and *per capita* family income[20]. The mixture with "Unstable Trajectory" in the second plan results in lowering the age group and the total time span and in expanding the presence of men, of child, of occupied people for less than eight years on their current job and the number of occupation's and non-occupation's spells. Finally, the mixture with "Secure Trajectory" as a secondary part of a mixed profile leads to a rise of the age group, of the school grade, of the occupational time span, of the total time informed, of the proportion of occupied family members and of the work and family income.

The mixed profiles of "Precarious and Unstable" and "Precarious and Secure" and "Secure and Precarious" trajectories correspond basically to household servants, besides being chiefly feminine and not significant as to their amount (FIG. 3).

The "Unstable and Precarious" profile is related to occupied workers for less than eight years on the current job, to individuals with little schooling and high occupational instability, tending to be black and mixed persons and to get low work and family income.

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[20] For instance, considering the "Precarious" profile as secondary, the "Mixed Secure and Precarious" profile was compared to the "Secure", and the "Mixed Unstable and Secure" profile was compared to the "Unstable".

The elements related to the "Unstable and Secure" and "Secure and Unstable" profiles display similar characteristics. They are likely to be occupied for less than eight years, to achieve high school grade, high occupational stability and considerable work and family income. The difference between each other and to those belonging to the "Secure" profile is, essentially, the occupational stability. The occupational stability tends to increase from the "Unstable and Secure" to "Secure and Unstable" and then to "Secure".

The individuals from the "Mixed Trajectories without Predominance" tend to be occupied for less than eight years, especially as servant and self-employed, a little older adults, with low schooling, big families and low personal and family income.

At last, an examination of each occupational position by profiles show that the most durable and secure labor relation's types tend to be "public sector employee", "others" and "employer" (FIG. 4). And the most unstable positions are the unprotected and the protected "private sector employee", while "self-employed" and "family worker" lay in between.

FIGURE 4:
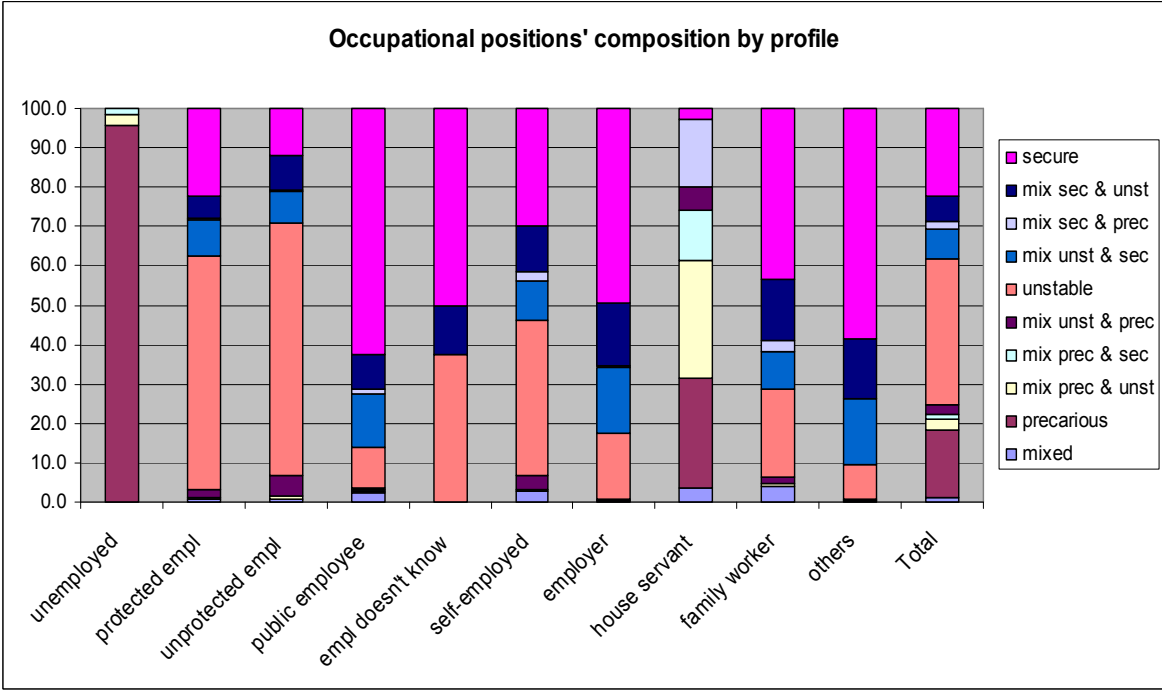
Source: Author's calculations.
Note: Weighted data.

The "household servants" category stands out for its much diversified composition concerning the profiles. At least a considerable part of the greater diversity of socio-occupational profile among women results from the incidence of servants, because women's share in this category surpasses the 95% and 20% of the working women in SPMA are servants. The high profile's diversity among household servants reveals the great heterogeneity inside this category, larger than it is regularly recognized.

It shall be noticed that 95% of the unemployed persons are in the pure "Precarious Trajectory" profile. Besides, *all* of them, independently from sex, age or school grade, are distributed among the "Precarious" profiles as predominant (be it pure or mixed) and the "Mixed without Predominance" profile.

The profiles by position in the family

Considering the two families' types regarding their nucleus (single head nucleus and composite nucleus) and separating the single head's type by her/his sex, one can see that the profiles structure of the 'single male head nuclei' is much alike that of the 'head of composite nuclei', and, at the other hand, the profiles structure of the 'single female head nuclei' is very similar to that of the 'spouse' (TAB. 9).

TABLE 9:
Distribution (in %) and number of household's heads and spouses by individual profile
according to type of "family nucleus" – SPMA – Apr-Dec/2001

Profile	Single head nucleus		Composite nucleus	
	male head	female head	head	spouse
mixed	(*)	1.85	0.81	1.24
precarious	7.82	11.25	7.53	12.30
mix prec & unst	(*)	4.28	(*)	2.46
mix prec & sec	(*)	1.67	(*)	1.60
mix unst & prec	(*)	2.59	0.75	2.35
unstable	34.31	13.59	34.72	11.86
mix unst & sec	8.15	3.94	8.05	3.81
mix sec & prec	(*)	2.59	0.38	1.86
mix sec & unst	5.64	2.70	5.13	3.85
secure	19.05	14.45	24.08	12.12
inactive	22.13	40.55	16.28	45.53
others[1]	(*)	(*)	1.55	1.02
total	100.00	100.00	100.00	100.00
Number	2110	5635	16092	16092

Source: Author's calculations.
(*) - Non-representative absolute values.
(1) - The "others" category refers to those with undefined occupational status, those who are
unemployed with no previous job experience and those aged 10 to 15 years old.
Notes: a) Weighted data.
      b) The categories "inactive" and "others" weren't considered in the typology.
      c) 97.76% of the heads with spouse are men. As there is no couple of the same sex in the sample,
97.76% of the spouses are female.

These resemblances occur in spite of existing some family heads who are female in the
composite nuclei (with spouses who are male), but this kind of arrangement doesn't even
reach 2.5% of the composite nuclei. The more significant differences are among the shares
of the "Inactive" and the "Secure" individuals. This similarity could indicate that position
in the family is not as important to the occupational trajectory as gender is.

Comparing the profile structure of the male heads of the family (with and without spouse)
to the female spouses', it's obvious that the two structures differ one from another a lot
(FIG. 5). A little more than 45% of the spouses are still inactive, despite their long lasting
and accelerated process of increasing participation in the labor force since mid seventies.

FIGURE 5:

Profiles' distribution of women and men above 18 years old by position in the family, separating the male head by type of family nucleus
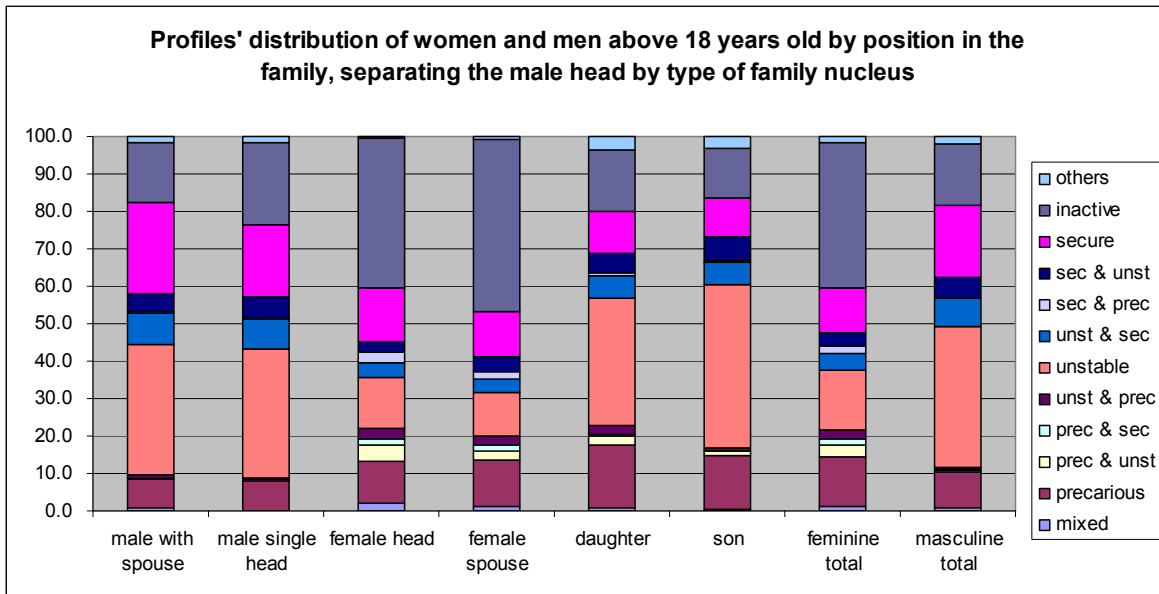
Source: Author's calculations.
Notes: a) Weighted data.
    b) Others positions in the family are included in the "total" columns.
    c) The profile "Others" corresponds to those with undefined occupational status and to unemployed individuals with no previous job.
    d) Male spouses were excluded due to their small number in the sample. The great majority of the "female heads" (94%) are of single head.

Analyzing the different women's position in the family and taking into account those "children" older than 18 years, it becomes clear that the economic performance of daughters can be distinguished from that of female heads and spouses (FIG. 5). Again the biggest difference is among those out of the labor force. Spouses still reveal the largest proportion of inactive persons, followed closely by female heads and, far behind, by daughters. The profile structure of female heads and female spouses are very similar to each other, as anticipated by the comparison between female heads and spouses of both sexes (TAB. 9).

Comparing the profile structures of the male heads, sons and daughters, the distinction from the children's to the male heads' economic performances stands out as well as the relative similarity between sons' and daughters' performance (FIG. 5). Sons are a bit more concentrate in the "Unstable" profile, while daughters are more evenly distributed.

At last, the difference between the single male head and the male head with spouse is small and is located in the inactivity's share (larger among the single heads) and in the proportion of "Secure" (larger for those who have a wife). In part, this arises from the different age profiles of the two types of male headship (FIG. 6). The single male heads are more concentrated among those over 60 years old (and among those in the beginnings of their twenties too).

FIGURE 6:

Age distribution of members (over 18 years-old) of the family nuclei
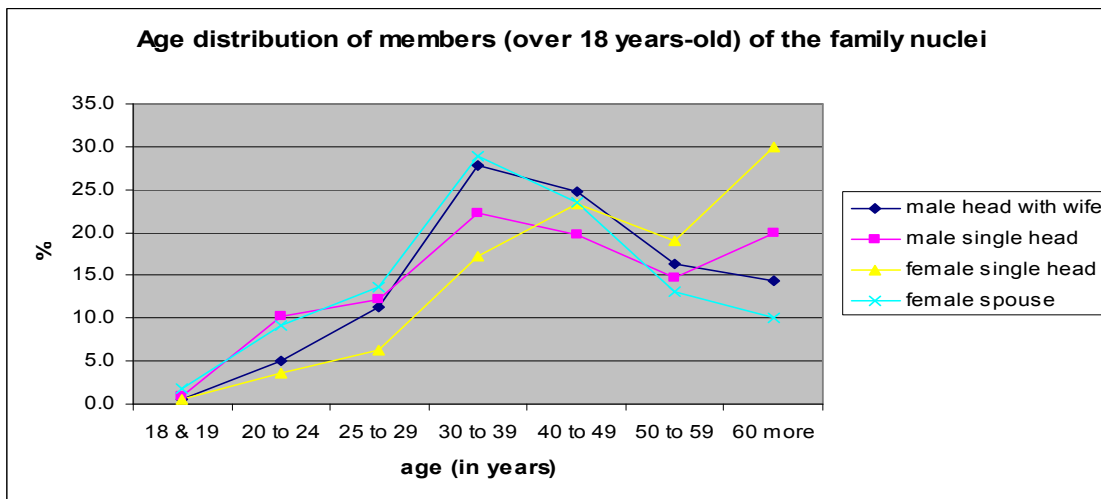
Source: Author's calculations.
Note: Weighted data.

If all this is true, three groups of socio-economic performance in SPMA's labor market are found out: first, that of the male family heads; second, that of female heads and spouses; and, third, that of daughters and sons older than 18 years.

The profile structure of male heads is noticeable for the importance of the "Secure Trajectory" and for the small importance of the "Precarious". The "Unstable" doesn't distinguish the male heads' structure from that of the daughters' and its high proportion among the male heads calls attention. The profile composition of the children older than 18 years differentiates itself from the male heads' due to the relevance of the "Precarious Trajectories" and from the female heads and spouses' structure because of the "Unstable Trajectories". Sons and daughters display the highest level of economic activity.

At last, the profile composition of female heads and female spouses singles itself out due to the high incidence of inactivity. This attracts attention and points to possible harder living conditions of families headed by a single woman, although the respective inactivity states are not the same. Approximately 22% of the female heads are retired and receive a pension, against less than 4% of the female spouses. In average, the female single head is 50.3 years old and her family is composed by 2.8 members, while the female spouse is 39.9 years old in a family with 3.8 members. Notwithstanding, the families headed by a single woman tend to cluster a little more among the poorest families, although the missing data of income may disturb the conclusion (FIG. 7).

FIGURE 7:

Distribution of female single head and female spouse by quarters of *per capita* family earnings
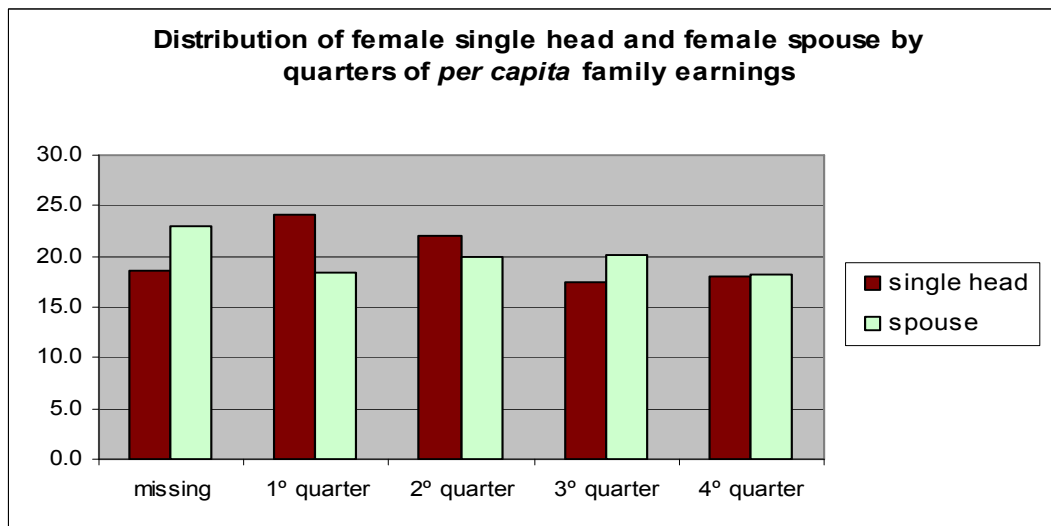
Source: Author's calculations.
Note: Weighted data.

Final considerations

Two outstanding characteristics of Brazilian labor market are instability and heterogeneity. These characteristics are related to each other and some workers are much more prone to experience jobs which don't last long. As in other countries, women, especially those married, are increasingly taking part at the labor force in Brazil. These three characteristics (high transience, heterogeneity and rise of the feminine labor force rate) and the concept of "occupational trajectory" make up the departing point to this study. "Occupational

trajectory" is regarded as the combination of successive occupational states and the transitions between them. Then, the concept of "trajectory" and the usage of a typology favor an examination about the dynamism and the heterogeneity in the labor market.

First, a typology of individuals in the labor market was developed. The typology takes into account personal attributes and occupational characteristics, i.e. of the jobs and of the transitions between situations in the labor market. In fact, it is a socio-occupational typology. The method used to build it up is based in the *fuzzy sets* theory, which copes more adequately with the heterogeneity among the elements. The three more prevalent types obtained are "Precarious", "Unstable" and "Secure" Trajectories, which comprise just about three quarters of the total active individuals in SPMA's labor market. The distribution of women and men among the profiles shows that women are spread in a larger number of profiles and under influence of the "Precarious Trajectory" in a much higher degree than men. One of the reasons to this seems to be the household service, as women alone are responsible for the household service almost entirely and roughly 20% of the "economically occupied" women in SPMA are servants, which is a position associated to several profiles, but highly concentrated in the "Precarious" profiles. In their turn, men are much more concentrated in the "Unstable" profile, while individuals of both genders are similarly represented in the "Secure".

After developing and analyzing the profiles and including categories which weren't considered to build up the typology (basically, the inactive individuals), the economic performance of the family members was examined. At first sight, it looks like "position in the family" was not as important to the occupational trajectory as gender is. This conclusion comes about because the profile structure of "single male head" is very much alike to that of "male head with spouse" and, on the other hand, the structure of "single female head" resembles that of "spouse".

As soon as "children over 18 years old" by sex are included in the investigation, the differences concerning the profiles by position in the family appear. The pair "Female head with spouse" and "male spouse" is very rare and, therefore, was excluded from the study, in

order to avoid mixing up the typical associations between profiles and positions in the family. After examining and comparing the profiles structure of family members, three groups were identified: first, "male head" (with or without spouse); second, "female single head" and "female spouse"; and, third, "son over 18 years old" and "daughter over 18 years old". The importance of the "Secure Trajectory" distinguishes the male head's profiles structure. For the female single head and spouse, the weight of the inactivity stands out. And, in the case of the children, the high rate of activity and the weight of the "Unstable" Trajectories are noticeable.

This categorization is comparable to that created by MONTALI (MONTALI, 1998, *apud* MONTALI, LOPES, 2002, p. 23), in spite of some differences in the characteristics studied, in the method applied and in the results. Considering labor force participation, unemployment rate, kind of jobs and labor relations, MONTALI (1998, *apud* MONTALI, LOPES, 2002) identified three groups of individuals with similar insertion in the labor market: first, male heads, sons over 18 and daughter over 18 years old; second, female heads and spouses; and, third, sons under 18 and daughters under 18 years old. The classification developed by MONTALI (1998) focuses basically on the individuals' "labor market's insertion", while that developed in this study take into account a much wider range of characteristics, in particular those concerning the dynamics in the labor market. The socio-economic performance of the teenagers under 18 years wasn't examined in this study, especially due to their short labor experience. So, the biggest difference between both ways of classification refers to aggregating male heads and children in one group *versus* separating them. One could say that male heads' and children's occupational histories tend to differ, although their economic indexes (as revealed by cross-section surveys) tend to be alike. Besides, some of the individuals' attributes (for instance, age and position in the family) are not the same and this caused their profiles, which support the categorization, to diverge.

A striking finding of this study sanctions the categorization created by MONTALI (1998). The profiles compositions of "female heads" and "spouses" resemble each other very much. Due to the higher responsibility of "female heads" towards family survival, a more

stable and secure economic profile should be expected from them. It looks like as if the economic performance of a woman in the family nucleus is nearly the same, having she a husband or not. However, this may be misleading in part. The smaller size of their family and the incidence of retirement pension among the single female heads counterbalance to some degree their "insufficient" economic performance.

This investigation's conclusions bring about the importance of considering both the dynamic feature of the workers' histories and their age, gender and position in the family when studying labor markets, especially an unstable and heterogeneous one. In order to understand more adequately the relations between "family" and "labor market" and the family well-being, it is important to investigate the dynamic performance of the family members. This leads the attention to the combination of socio-occupational profiles through marriage, what shall be examined next.

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Appendix

TABLE 1 – A:

Marginal frequencies, estimated probabilities and describing quocients to the Extreme Profiles according to responses to variables concerning the individual, her/his jobs and her/his transitions

(continues)

Variables	Responses	Marg Freq Abs.	Marg Freq Rel.	Lambdas 1	Lambdas 2	Lambdas 3	Lambdas / Freq 1	Lambdas / Freq 2	Lambdas / Freq 3
sexo	male	23606	0.547	0.318	0.656	0.559	0.582	1.198	1.022
(sex)	female	19522	0.453	0.682	0.345	0.441	**1.505**	0.760	0.974
inst2	missing	67	0.002	0.000	0.000	0.000	0.000	0.000	0.000
(schooling)	no schooling / illiterate	1766	0.041	0.089	0.025	0.037	**2.171**	0.617	0.890
	incomplete first grade	14611	0.339	0.483	0.307	0.279	**1.423**	0.905	0.824
	complete first grade	5493	0.127	0.139	0.137	0.106	1.094	1.080	0.835
	incomplete second grade	3564	0.083	0.108	0.089	0.056	**1.300**	1.076	0.676
	complete second grade	10680	0.248	0.166	0.316	0.213	0.668	**1.274**	0.857
	incomplete college	2221	0.051	0.016	0.066	0.054	0.314	**1.298**	1.065
	complete college	4726	0.110	0.000	0.060	0.255	0.000	0.541	**2.319**
fxet	16 to 19 years old	3859	0.089	0.164	0.076	0.061	**1.845**	0.851	0.680
(age	20 to 24 years old	7213	0.167	0.192	0.269	0.000	1.151	**1.609**	0.000
group)	25 to 29 years old	6508	0.151	0.141	0.221	0.054	0.935	**1.460**	0.358
	30 to 39 years old	11217	0.260	0.250	0.271	0.247	0.960	1.040	0.952
	40 to 49 years old	8558	0.198	0.178	0.129	0.311	0.901	0.650	**1.571**
	50 to 59 years old	4125	0.096	0.070	0.036	0.212	0.724	0.375	**2.205**
	60 years old and over	1648	0.038	0.005	0.000	0.115	0.126	0.000	**3.034**
cor	missing	1	0.000	0.000	0.000	0.000			
(color)	white or yellow	27744	0.643	0.454	0.651	0.760	0.705	1.012	1.182
	black or *parda*	15383	0.357	0.546	0.349	0.240	**1.531**	0.978	0.673
migr10	native or imigr +10 years	35623	0.826	0.763	0.764	0.957	0.924	0.925	1.159
(migration)	imigrant for 10 years or -	7505	0.174	0.237	0.236	0.043	**1.360**	**1.356**	0.247

TABLE 1 – A:

Marginal frequencies, estimated probabilities and describing quocients to the Extreme Profiles according to responses to variables concerning the individual, her/his jobs and her/his transitions

(continuation)

Variables	Responses	Marg Freq		Lambdas			Lambdas / Freq		
		Abs.	Rel.	1	2	3	1	2	3
tfam	one person	2429	0.056	0.046	0.058	0.061	0.829	1.032	1.086
(family size)	two persons	5888	0.137	0.107	0.143	0.148	0.782	1.043	1.077
	three persons	10108	0.234	0.202	0.249	0.236	0.862	1.063	1.008
	four persons	11765	0.273	0.228	0.271	0.308	0.834	0.991	1.127
	five persons	7273	0.169	0.163	0.172	0.167	0.965	1.015	0.991
	six persons	3101	0.072	0.099	0.070	0.056	**1.379**	0.972	0.772
	seven persons	1264	0.029	0.054	0.027	0.016	**1.866**	0.921	0.559
	eight persons	645	0.015	0.031	0.012	0.009	**2.060**	0.780	0.600
	nine or more	655	0.015	0.070	0.000	0.000	**4.653**	0.000	0.000
instc	missing	151	0.004	0.000	0.000	0.000	0.000	0.000	0.000
(head of the	no schooling / illiterate	3530	0.082	0.157	0.070	0.054	**1.912**	0.851	0.652
family's	incomplete first grade	19171	0.445	0.569	0.463	0.341	**1.279**	1.040	0.767
schooling)	complete first grade	5513	0.128	0.127	0.142	0.108	0.994	1.109	0.847
	incomplete second grade	1915	0.044	0.042	0.053	0.034	0.950	**1.205**	0.764
	complete second grade	7232	0.168	0.101	0.184	0.190	0.604	1.093	1.132
	incomplete college	1258	0.029	0.004	0.033	0.042	0.128	1.121	**1.441**
	complete college	4358	0.101	0.000	0.057	0.231	0.000	0.559	**2.290**
psfam	not relative	686	0.016	0.032	0.014	0.008	**1.994**	0.888	0.469
(family's	head	19269	0.447	0.266	0.447	0.571	0.594	0.999	**1.278**
position)	spouse	9123	0.212	0.340	0.130	0.243	**1.605**	0.614	1.147
	child	11531	0.267	0.277	0.345	0.147	1.036	**1.292**	0.549
	other relative	2519	0.058	0.086	0.064	0.031	**1.474**	1.105	0.541
sitocr	ocup 8 years or +	8312	0.193	0.000	0.000	0.697	0.000	0.000	**3.609**
(occupational	ocup - 8 years	28189	0.654	0.113	1.000	0.303	0.173	**1.529**	0.464
status)	unempl 8 years +	274	0.006	0.030	0.000	0.000	**5.000**	0.000	0.000
	unemp -8 ex-employee	5370	0.125	0.747	0.000	0.000	**5.972**	0.000	0.000
	unemp -8 ex-others	983	0.023	0.110	0.000	0.000	**4.800**	0.000	0.000
epioc	one spell	13885	0.322	0.290	0.000	1.000	0.902	0.000	**3.106**
(spells of	two spells	18294	0.424	0.710	0.518	0.000	**1.674**	**1.222**	0.000
occupation)	three spells	10949	0.254	0.000	0.482	0.000	0.000	**1.896**	0.000

TABLE 1 – A:

Marginal frequencies, estimated probabilities and describing quocients to the Extreme Profiles according to responses to variables concerning the individual, her/his jobs and her/his transitions

Variables	Responses	Marg Freq Abs.	Marg Freq Rel.	Lambdas 1	Lambdas 2	Lambdas 3	Lambdas / Freq 1	Lambdas / Freq 2	Lambdas / Freq 3
epids	no spell	14887	0.345	0.000	0.000	1.000	0.000	0.000	**2.899**
(spells of	one spell	18204	0.422	0.586	0.688	0.000	**1.388**	**1.630**	0.000
non-occupation)	two spells	10037	0.233	0.414	0.312	0.000	**1.778**	**1.339**	0.000
pos1	doesn't apply	6627	0.154	0.682	0.000	0.000	**4.429**	0.000	0.000
(current	protected employee	15210	0.353	0.000	0.572	0.298	0.000	**1.620**	0.845
occupation's	unprotected employee	5007	0.116	0.000	0.224	0.042	0.000	**1.928**	0.365
position)	public sector employee	3028	0.070	0.000	0.000	0.216	0.000	0.000	**3.081**
	empl doesn't know	16	0.000	0.000	0.000	0.000			
	self employed	7583	0.176	0.000	0.198	0.264	0.000	1.124	**1.501**
	employer	1747	0.041	0.000	0.000	0.126	0.000	0.000	**3.071**
	household servant	3037	0.070	0.318	0.000	0.000	**4.541**	0.000	0.000
	family worker	446	0.010	0.000	0.007	0.023	0.000	0.680	**2.260**
	other	427	0.010	0.000	0.000	0.031	0.000	0.000	**3.110**
pdio	doesn't apply	13517	0.313	0.000	0.000	1.000	0.000	0.000	**3.195**
(prior	employee	22116	0.513	0.584	0.823	0.000	1.139	**1.605**	0.000
occupation's	self employed	3913	0.091	0.112	0.143	0.000	**1.229**	**1.569**	0.000
position)	household servant	2763	0.064	0.294	0.000	0.000	**4.600**	0.000	0.000
	other	772	0.018	0.010	0.034	0.000	0.539	**1.878**	0.000
	missing	47	0.001	0.000	0.000	0.000	0.000	0.000	0.000
pos3	missing	295	0.007	0.011	0.010	0.000	**1.529**	**1.386**	0.000
(before prior	protected employee	7571	0.176	0.199	0.306	0.000	1.129	**1.740**	0.000
occupation's	unprotected employee	3594	0.083	0.129	0.122	0.000	**1.554**	**1.466**	0.000
position)	public sector employee	321	0.007	0.009	0.012	0.000	**1.329**	**1.657**	0.000
	self employed	1647	0.038	0.053	0.058	0.000	**1.389**	**1.526**	0.000
	household servant	1377	0.032	0.148	0.000	0.000	**4.619**	0.000	0.000
	other	295	0.007	0.006	0.012	0.000	0.800	**1.729**	0.000
	doesn't apply	28028	0.650	0.446	0.481	1.000	0.686	0.740	**1.538**

TABLE 1 – A:

Marginal frequencies, estimated probabilities and describing quocients to the Extreme Profiles according to responses to variables concerning the individual, her/his jobs and her/his transitions

Variables	Responses	Marg Freq		Lambdas			Lambdas / Freq		
		Abs.	Rel.	1	2	3	1	2	3
ram2	missing	25	0.001	0.000	0.000	0.000	0.000	0.000	0.000
(current	industry	7382	0.171	0.000	0.246	0.182	0.000	**1.438**	1.064
activity	construction	972	0.023	0.000	0.038	0.016	0.000	**1.630**	0.683
sector)	comerce	5815	0.135	0.000	0.190	0.148	0.000	**1.407**	1.097
	services	19099	0.443	0.000	0.527	0.654	0.000	1.189	**1.477**
	household services	3037	0.070	0.318	0.000	0.000	**4.541**	0.000	0.000
	others	171	0.004	0.000	0.000	0.000	0.000	0.000	0.000
	doesn't apply	6627	0.154	0.682	0.000	0.000	**4.429**	0.000	0.000
rdio	doesn't apply	13517	0.313	0.000	0.000	1.000	0.000	0.000	**3.195**
(prior	industry	7065	0.164	0.191	0.262	0.000	1.165	**1.599**	0.000
activity	construction	1076	0.025	0.030	0.040	0.000	1.192	**1.584**	0.000
sector)	comerce	5073	0.118	0.127	0.193	0.000	1.076	**1.636**	0.000
	services	13276	0.308	0.351	0.493	0.000	1.138	**1.600**	0.000
	household services	2769	0.064	0.296	0.000	0.000	**4.620**	0.000	0.000
	others	304	0.007	0.006	0.012	0.000	0.843	**1.757**	0.000
	missing	48	0.001	0.000	0.000	0.000	0.000	0.000	0.000
ram3	missing	301	0.007	0.011	0.010	0.000	**1.514**	**1.443**	0.000
(before prior	industry	3666	0.085	0.107	0.137	0.000	**1.261**	**1.606**	0.000
activity	construction	592	0.014	0.018	0.021	0.000	**1.300**	**1.507**	0.000
sector)	comerce	2627	0.061	0.077	0.097	0.000	**1.266**	**1.585**	0.000
	services	6351	0.147	0.190	0.241	0.000	**1.290**	**1.640**	0.000
	household services	1377	0.032	0.148	0.000	0.000	**4.622**	0.000	0.000
	others	186	0.004	0.005	0.007	0.000	**1.275**	**1.700**	0.000
	doesn't apply	28028	0.650	0.444	0.488	1.000	0.683	0.750	**1.538**
qtoct	missing	6	0.000	0.000	0.000	0.000			
(quarters of	from 0,0100 to 0,5946	10775	0.250	0.671	0.243	0.000	**2.686**	0.971	0.000
'occupational	from 0,5949 to 0,8810	10720	0.249	0.275	0.431	0.000	1.105	**1.731**	0.000
spans divided by	from 0,8812 to 0,9999	6740	0.156	0.054	0.326	0.000	0.343	**2.090**	0.000
total time span')	1.0000	14887	0.345	0.000	0.000	1.000	0.000	0.000	**2.899**

TABLE 1 – A:

Marginal frequencies, estimated probabilities and describing quocients to the Extreme Profiles according to responses to variables concerning the individual, her/his jobs and her/his transitions

(continuation)

Variables	Responses	Marg Freq Abs.	Marg Freq Rel.	Lambdas 1	Lambdas 2	Lambdas 3	Lambdas / Freq 1	Lambdas / Freq 2	Lambdas / Freq 3
qttt	missing	6	0.000	0.000	0.000	0.000			
(quarters of	till 47 months	10649	0.247	0.495	0.250	0.093	**2.004**	1.012	0.378
total time span	from 47,2 to 89,1	11004	0.255	0.287	0.421	0.000	1.125	**1.651**	0.000
informed)	from 90 to 132 months	10274	0.238	0.122	0.240	0.300	0.513	1.008	**1.262**
	longer than 132 months	11195	0.260	0.096	0.089	0.606	0.370	0.344	**2.332**
qpof	up to 0,30	12522	0.290	0.712	0.183	0.174	**2.454**	0.631	0.598
(quarters of	from 0,33 to 0,45	11481	0.266	0.230	0.265	0.291	0.865	0.994	1.092
occupied family	from 0,50 to 0,67	7845	0.182	0.058	0.222	0.204	0.320	**1.220**	1.121
members'	more than 0,71	11280	0.262	0.000	0.331	0.332	0.000	**1.261**	**1.266**
proportion)									
qrbtpr	missing	7085	0.164	0.000	0.186	0.236	0.000	1.134	**1.437**
(quarters of	up to R$ 300.00	7575	0.176	0.242	0.174	0.141	**1.377**	0.990	0.799
main job's	from R$ 301 to R$ 499	6414	0.149	0.000	0.256	0.084	0.000	**1.719**	0.562
gross earning)	from R$ 500 to R$ 944	8072	0.187	0.000	0.260	0.195	0.000	**1.393**	1.045
	more than R$ 945.00	7355	0.171	0.000	0.123	0.345	0.000	0.720	**2.015**
	doesn't apply	6627	0.154	0.758	0.000	0.000	**4.919**	0.000	0.000
tamemp	doesn't apply	6627	0.154	0.682	0.000	0.000	**4.429**	0.000	0.000
(kind / size of	work alone	4109	0.095	0.000	0.078	0.190	0.000	0.816	**2.002**
the firm)	with partner or till 2 empl	3879	0.090	0.000	0.097	0.143	0.000	1.077	**1.590**
	with 3 to 9 employees	4117	0.095	0.000	0.149	0.086	0.000	**1.563**	0.901
	with 10 to 49 employees	4584	0.106	0.000	0.177	0.080	0.000	**1.669**	0.751
	with 50 to 499 employees	4324	0.100	0.000	0.165	0.078	0.000	**1.645**	0.782
	with 500 empl or more	5206	0.121	0.000	0.166	0.141	0.000	**1.369**	1.165
	at another's house	3037	0.070	0.318	0.000	0.000	**4.541**	0.000	0.000
	at public institution	3039	0.070	0.000	0.000	0.221	0.000	0.000	**3.154**
	doesn't know	4206	0.098	0.000	0.170	0.062	0.000	**1.737**	0.628
tdsf	hasn't	33065	0.767	0.640	0.788	0.820	0.834	1.027	1.068
(unemployed	has	10063	0.233	0.360	0.212	0.181	**1.546**	0.911	0.775
family member)									

TABLE 1 – A:

Marginal frequencies, estimated probabilities and describing quocients to the Extreme Profiles according to responses to variables concerning the individual, her/his jobs and her/his transitions

Variables	Responses	Marg Freq		Lambdas			Lambdas / Freq		
		Abs.	Rel.	1	2	3	1	2	3
iccf	hasn't	30176	0.700	0.589	0.684	0.794	0.841	0.977	1.135
(kid under 7 y.o.	has	12952	0.300	0.411	0.316	0.206	**1.371**	1.053	0.685
in the family)									
qrfc	missing	11667	0.271	0.136	0.302	0.352	0.500	1.114	**1.298**
(quarters of	up to R$146.50	7866	0.182	0.577	0.071	0.000	**3.171**	0.389	0.000
per capita	from R$146.67 to R$283.33	8055	0.187	0.195	0.233	0.120	1.043	**1.245**	0.639
family income)	from R$283.50 to R$529.00	7675	0.178	0.092	0.222	0.187	0.519	**1.247**	1.048
	more than R$530.00	7865	0.182	0.000	0.172	0.342	0.000	0.947	**1.880**

Source: Author's calculations.

(1) In Brazil, there are three school's grades: first (or fundamental) grade, with eight years; second (or median) grade, with three or four years; and college (or superior grade), with, at least, three years.

(2) *Pardo* is the Brazilian surveys' denomination to the mixture of white and black of a person's "color".