## Income and poverty levels of vulnerable groups in the nineties in Sao Paulo Metropolitan Area

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#### Abstract

The paper presents the recent trends on family income level, income distribution and poverty in Sao Paulo Metropolitan Area (SPMA) and its social impacts on some vulnerable groups. SPMA is the most industrialized and developed region in Brazil and was seriously affected by the large economic changes that took place in Latin America in the 90's. The paper shows that, as a consequence of the expressive changes observed on family income, unemployment and food costs, the proportion of extremely poor families raised from 6% to 12 % of the total families in SPMA between 1990 and 1994. Four years later, in 1998, with the raise of wages and social security transfers the figures of extreme poverty fell to the levels of the beginning of the decade (5,7 %). The income distribution, although, became even worst. Each vulnerable group followed a distinct trend on such dimensions. Some of then, like the retired people showed better figures in the period. Others, like unskilled workers became more vulnerable to unemployment and poverty.

### 1. Introduction

Several studies have been indicating that the poverty levels would have presented a significant decrease in the last four years in Brazil, as a consequence of the macroeconomic stabilization plan that was implemented in 1994. The rise of the minimum wage, the stability of the basic products prices, the consumption increase of non durable and durable goods would be unequivocal manifestations of the reduction of the poverty levels for the whole national territory (Rocha 1996, Arias 1996, Cyrillo *et al.* 1997, Arias 1998, Hoffmann 1998). Even in the Sao Paulo Metropolitan Area (SPMA), which has been undergoing through an accentuated unemployment increase and losses of job positions in industrial and formal sectors in the 90's , it would be verified this reduction of the poverty levels (Dini *et al.* 1999).

The most recent results of the Living Conditions Survey (LCS) in SPMA, accomplished in the last months of 1998 by F.SEADE (Sao Paulo Statistical Office), allows us to evaluate in a more definitive way those tendencies already pointed, and also let us analyze the recent evolution of the family income, its of distribution over the families and poverty. So, more specifically, the objective of this paper is to present an analysis of poverty evolution in the SPMA in the nineties, and to discuss the role of per capita family income, the cost of the basic basket and the conjuncture of the job market for the observed trends. For that, this paper uses the empirical data collected by the three last runs of the LCS (1990, 1994 and 1998). As it was already pointed out in other opportunities (ILO 1994) this survey aims to evaluate- in a broad sense - the living conditions of the SPMA population, collecting not only data related to the revenue sources, but also data on the characteristics of labor market, educational progression, access to health services, housing conditions and urban infrastructure. This paper concentrates on one of this living conditions dimension, that is, it focuses indigence and poverty as lack of a minimum per capita income to buy a food or a basic basket, respectively. It is certainly a important dimension to guide social policy, but not the exclusive one.

### 2. Family income and its distribution in the nineties

The nineties has been marked by abrupt ups and downs of GDP and structural changes of the Economy, with direct impacts on the Brazilian and metropolitan job market- and consequently,

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on the available income for the families (Baltar, Dedecca & Henriques 1997). During the period from 1990 to 1992, the GDP growth rates were negative or, in the best moments, very low (1% in 1991). In this period Sao Paulo industrial production dropped sharply, taking to very high levels the unemployment rate. As analyzed by Arias (1996) and Dini *et al.* (1999), the family income reached in 1992 its lowest point of the decade. In the two following years, as the National Economy started to grow (4,5% in 1994) the unemployment rate decreased–but not at the level of the beginning of the decade. The labor income recovered part of its purchasing power previously lost, as Unions were able to claim for their losses with the past levels of inflation. The economic conjuncture kept favorable to the expansion of the income up to 1996, when , as a consequence of the international instability (Asian and Russian crisis), the unemployment started again to increase

Indicator	1990	1994	1998	
Total Family income (R\$)	1413	1356	1632	
Average wage (R \$)	782	748	957	
Social Security Transfers (R \$)	346	370	517	
Unemployment rate (%)	13,2	17,0	20,2	
Retired people (over persons aged 10 and older) (%)	7,1	8,1	9,4	
Participation of labor in family income (%)	83,6	80,9	75,7	
Participation of pensions in family income (%)	12,3	13,9	16,5	
Participation of other income in family income (%)	4,1	5,2	7,8	
Source: SEADE. Living Conditions Survey .				

Table 1: Evolution of the Total Family Income and its main componentsSão Paulo Metropolitan Area 1990-1998

Using the LCS data collected in 1990, 1994 and 1998 it is possible to verify the partial reflexes of these different economical contexts related above. In this sense, it is worth to note that, in June of 1994, the survey reference month, the family income had not already recovered its purchasing value (R\$ 1356 in 1994 against R\$ 1413 in 1990). Such fact is explained by the unfavorable evolution of the job earnings and of the occupation rate in the period: in 1994, job earnings were 4% smaller than in 1990 and the occupation rate was reduced by four percentile points. Fortunately, it had been observed a real increase in the Social Security transfers and in the number of retired people, which certainly contributed for a smaller drop in average family income.

Indicator	1990	1994	1998
Per capita Family income (R\$)	420,3	426,0	560,7
Average family size	3,9	3,7	3,5
10% richest per capita income (R\$)	1581,5	1793,3	2460,4
25% richest per capita income (R\$)	1019,5	1114,3	1513,6
25% poorest per capita income (R\$)	96,7	75,4	92,5
10% poorest per capita income (R\$)	62,7	43,5	54,1

Table 2: Evolution of per capita Family IncomeSão Paulo MetropolitanArea1990-1998

Source: SEADE. Living Conditions Survey.

Even the unfavorable evolution of the occupation rates (and of the loss of formal work positions and in the industry), the family income reached a level about 20% larger in 1998 compared to 1994 in the Metropolitan Area. Such fact is explained by the large increase of wages (28%) and the social security transfers (40%), and also by the increase of the retirements in the period. Besides, the real increase of family income it is also due the growing importance of other non labor revenues (such as rents, personal transfers, etc).

It should be noted that the per capita income evolution had been very different among the poorest and the richest families. In fact, per capita family income of the 10% poorest got to be smaller in 1994 compared to 1990 (-31%), a very different trend observed among the 10% richest

(an 13% increase). In 1998, the figures were both positive but still very different among the two groups: a 37% increase compared to 1994 among the 10% richest and 24% among the 10% poorest. Data not presented here confirm, as stated by Dini *et al.* (1999) and Arias (1998), that that less favorable increase of per capita income of the poorest, in 1994 and in 1998, is due to the combination of higher unemployment rates and of a lower growth of job earnings compared to the richest families.

The more favorable evolution of the per capita family income among the richest families along the decade, as pointed above, suggests a worsening of the distributive profile of the family income in the Metropolitan Area, as it is shown by Table 3. In the period, the distributive figures worsened, getting closer to national patterns, as reported by Hoffmann & Kageyama (1984) and Barros *et al.* (1997). In 1990, the 5% richest families appropriated 21% of the income mass; in 1998, they had enlarged their participation to 25%. The 25% richest enlarged their participation in total income from 55% to 63% in this short period, while the 25% poorest reduced their participation to 5,5% in 1998 (against 7% in 1990).

Table 3: Indicators of Income DistributionSão Paulo Metropolitan Area 1990-1998

Indicador	1990	1994	1998
Appropriation of the total income mass (%)			
by the 10% richest families	31,8	36,7	38,2
by the 25% richest families	55,0	61,1	63,0
by the 50% poorest families	22,2	17,7	17,3
by the 25% poorest families	7,3	5,6	5,5
by the 10% poorest families	1,3	1,4	1,4

Source: SEADE. Living Conditions Survey.

#### 3. Indigence and poverty in the nineties

As a consequence of the trends of family income – and the food basket costs – the poverty levels changed sharply during the decade. But before describing these trends, it is worth to note that for analytical purposes the families living in SPMA were classified into four strata according to their purchasing power: indigent families, vulnerable to indigence, less vulnerable and non poor families.

A family was considered indigent if, in June 1990, it didn't have money to buy a food basket which cost R\$ 71,38 per capita (the indigence line at that time). In 1994, it would be in that situation the families with per capita income less to R\$ 73,17, and in 1998, those with per capita income less than R\$ 62,26 (deflated values to September 1988). Vulnerable families were those with per capita income above the indigence line but under two times this line. Families with per capita income within two and three indigence line were classified as Less vulnerable families. Finally, the non poor families were the ones which per capita income was above three times the indigence line. These methodological options are certainly very debatable, as pointed by different authors (Feres & Leon 1990, Rocha & Ellwanger 1992, Ekker-Jafé 1994). Some of these methodological problems concerning the definition of indigence line and the definition of the income indicator have already been discussed by Seade (1992) and Jannuzzi (1997).

As one can see on Table 4, in 1990, 6% of the families were indigents and 33% were vulnerable (in any degree). Four years later, as a consequence of the income drop among the poorest families and also of the rise of food basket costs ( R\$ 71,38 to R\$ 73,17), the proportion of indigent families sharply increased, reaching 11% of the families in SPMA. In 1998, on the other hand, as the income grew and the costs of food dropped (R\$ 62,26) the indigence fell to 6%. The group of vulnerable families also decreased in this same intense way (20% to 13%), showing better figures of poverty not just compared to 1994, but also compared to the beginning of the decade.

Stratum	1990	1994	1998
Indigents	6,1	11,4	5,7
Vulnerable	17,4	20,1	12,6
Less vulnerable	15,8	15,5	14,7
Non poor	60,7	53,0	67,0
Total	100,0	100,0	100,0

Table 4: Evolution of Indigence and Poverty (%)
São Paulo Metropolitan Area 1990-1998

Source: SEADE. Living Conditions Survey.

In absolute terms, there was a decrease of about 224 thousand families in indigence situation in the last four years. Even though, due to the large population figures of SPMA, the poverty absolute numbers are still too big. In 1998, there were still 277 thousand indigent families (corresponding to 1,33 million people), 613 thousand families in the vulnerable stratum (2,6 million individuals), 715 thousand families in the Less vulnerable stratum (2,6 million individuals) and 3,258 million non poor families (10,5 million non poor individuals).

## 4. Effects of the increase of the income and decrease of the cost of the basket on the poverty

As it was noted in the previous section, not only the income variation explains these poverty figures, but also the relative prices of the food basket. So, the accentuated increase of poverty in 1994 is explained by the explosive combination of the significant fall of the per capita income among the poorest families and the increase of the prices of feeding products. The expressive decrease of the poverty in 1998, on the other hand, resulted of the virtuous association of increase of the family income and reduction of the basket costs.

Data brought in the Table 5 are illustrative in this sense: in July 1994 the food basket had increased above the average inflation measured by ICV-Dieese (one of the Living Cost Index used in SPMA), and also above the minimum wage; in September 1998, these figures changed radically. Similar trends had already been pointed by Cyrillo *et al.* (1997) in their paper on the evolution of food prices during the nineties. According to the authors, in the beginning of the decade, the prices raised close to the inflation; in 1993/94, the food prices increased 20% above the General Living Cost Index. From 1995 to 1998, the prices of food began to fall. As the food became cheaper, people started to improve their nutritional pattern, increasing the consumption of proteins (through milk and meat) and also of industrialized products.

The sensibility of poverty to changes on per capita family income and on the costs of the food basket can be evaluated through a hypothetical exercise of simulation. For that, the distribution of per capita family income was taken in 1998, removing its changes observed since 1990 and since 1994. In each one of these situations the indigence level was calculated taking the indigence line in 1990, 1994 and 1998.

Table 5: Accumulated Index of food basket, Livi	ing costs	and Minimum v	vage
São Paulo Metropolitan Area	1990-19	98	

Item	Jun/1990	Jul/1994	Sep/1998
Food basket	100	5.319.262	7.398.188
General Living Costs	100	5.185.648	8.475.382
Minimum wage	100	4.618.548	9.267.036
Source: DIEESE.			

As one he can verify in Table 6, in the simulated hypothetical conditions, the indigence could assume figures as high as 12%, if the average income had not raised since so and if the food basket remained at its higher value during this period (in July 1994). It can also be noticed by the following graphs that the reduction of the indigence from 1994 to 1998 was due to the

double effect of the decrease of the basket cost (  $\mathbb{R}$  73,17 to  $\mathbb{R}$  62,26) - that would allow, *ceteris paribus*, a hypothetical reduction of 2,5 percentile points in the indigence (8,2–5,7)–and of the increase of the family income (  $\mathbb{R}$  426 to  $\mathbb{R}$  561)–that would yield, by itself, with the other conditions remaining the same, a reduction of 3,7 percentile points in the indigence (9,4–5,7). Or, in an equivalent way, if it weren't the pointed changes in the basket costs and in the family income the indigence would reach 12% of the families of SPMA in 1998.

These results suggest that indigence levels are more elastic to variations of basket costs (decrease of 1 percentile point of indigence to each R\$ 4 of reduction in the basket) than to variations of per capita family income (decrease of 1 percentile point in the indigence for each R\$ 36 of increase in income). Such fact is due to the characteristics of the income distribution curve over the lower revenues segments, where the indigence line cuts. Income increases tend to dilate the curve to the right, preserving, however, the high "steepness" of the curve in the proximities of the indigence line. By its turn, this sharply "steepness" is consequence of the distributive pattern of income in Brazil, with large concentration of families in the lowest strata of income.

Table 6: Indigence according to different hypothesis on food basket costsSão Paulo Metropolitan Area 1990-1998

Cost of the Food Basket	Average jun/90	Per capita Jul/94	Income Set/98
	R\$ 420	R\$ 426	R\$ 561
Equal to the jun/90 basket (R\$ 71,38)	9,6	11,5	8,0
Equal to the jul/94 basket (R\$ 73,17)	12,1	11,9	8,2
Equal to the set/98 basket (R\$ 62,26)	11,8	9,4	5,7





Figure 2: Effect of the reduction of food basket cost over indigence in 1994-98





Figure 3: Effect of per capita income increase over indigence in 1994-98

## 5. Indigence levels in vulnerable groups

As it was shown in the last section, indigence levels in the nineties depended on the family income and food basket costs evolution during the period. These factors affected in a quite similar way different disadvantaged groups over the decade. The indigence levels kept higher in families headed by an unemployed person during all the decade, reaching 30% of these families in 1990. Families headed by an unskilled person were also affected by the indigence increase in 1994, due to the rise of unemployment. The unemployment can also explain the rise of indigence on families heade by a single household, as the householder is usually woman with few years of schooling. As the social security benefits did not follow the inflation figures in the first four years of the decade, there were an indigence increase inside the groups of families headed by a retired person or elder families. Larger families (with 3 or more children) were also affected in 1994 by an increase of its indigence levels.

Social group	1990	1994	1998
Families headed by a retired person	10,0	14,3	7,6
Families headed by a unemployed person	23,9	30,0	25,4
Families headed by an occupied unskilled person	7,3	18,3	7,2
Families headed by an occupied semi-skilled person	5,7	11,9	4,4
Families headed by an occupied skilled person	1,6	2,8	0,7
Families with 3 ou more children	8,4	18,1	11,5
Families headed by a single household	7,8	17,4	9,8
Single person or families headed by an 49 ys. old person	8,8	8,9	0,0
Total	6,1	11,4	5,7

Table 7: Evolution of Indigence in Vulnerable groups (%)São Paulo Metropolitan Area 1990-1998

Source: SEADE. Living Conditions Survey.

### 6. Final remarks

As shown in the previous sections, after reaching higher levels in 1994, poverty and indigence presented a significant decrease in the recent period. Such fact was due to the evolution of the per capita family income of the poorest families in the period and of the costs of the basic food basket in the period. The fall of the average family income of the poorest families between 1990 and 1994 - as a consequence of the elevation of the unemployment rates and of the real losses on the job earnings (by inflation) - combined with small increase of the cost of the food basket yielded an expressive increase of indigence in 1994. The augment of the purchasing power of wages and Social Security transfers in the last four years and the reduction of the food basket costs

guaranteed an expressive decrease of the poverty in 1998, in spite of the increase of the unemployment and of the inequality in the income distribution.

The reflexes of these results on Social Policy seem plenty clear. First, it is worth to remind the sensibility of indigence to variations of income and cost of the food basket. There are a lot of possible programs to affect one or other side of this equation: minimum income programs, job training programs, distribution of food baskets, reduction of the relative cost of the food basket through tax alleviation or by improving the logistics to take food producers closer to consumers, etc.

It is also important to reiterate the importance of the rise of the Social Security transfers and, therefore, of the minimum wage - for reduction of the poverty. With the population aging in course, that is, with the accentuated growth of the 60 or more year-old population, this mechanism will become more and more important as a social program in the reduction of the poverty of the inactive population. The retirement has been outstanding, in fact, as a contributive factor to lessen the gravity of the poverty in the Northeastern interior, given the importance of the inactive people in rural areas and the lack of economical dynamism in the region.

Finally, it is important to detach the perversity of the unemployment in terms of its effects on poverty and income distribution. If it weren't the significant increase of the minimum wage in the last four years, the growth of the unemployment in the period would have caused an elevation of the portion of indigent families, specially because the unemployment is reaching householders, men, at their more active ages. So, poverty alleviation claims for active economic policy, that may retake of the development in the country and in RMSP. To have direct impacts on the most vulnerable population, the model of the economical development should prioritize more labor intensive sectors such as Building, Urban Recovery, Production of food, Tourism, Leisure Services. Certainly, it is also very important to improve the development of modern services, with systemic connections with several branches of the industrial and commercial activity already installed in SPMA.

# REFERENCES

- ÁRIAS, A evolução recente da renda domiciliar per capita nas 6 maiores regiões metropolitanas e seus efeitos sobre a extrema pobreza. Brasília: IPEA, 1996.
- Sobre a evolução da situação social na Região Metropolitana de São Paulo na década dos 90 sob a ótica da renda familiar. Brasília: IPEA, 1998.
- BALTAR, P.E.A; DEDECCA, C.S & HENRIQUE,W. Mercado de trabalho no Brasil. In: OLIVEIRA, C.E.B & MATTOSO, J.E.L. (org) Crise e trabalho no Brasil. São Paulo: Scritta, 1997,p.87-108.
- BARROS, R.P.*et al.*. Bem-estar, pobreza e desigualdade de renda: uma avaliação histórica e das disparidades regionais. Rio de Janeiro: IPEA, 1997 (Texto para discussão n. 454).
- BARROS, R.P. & MENDONÇA, R. Determinantes da desigualdade no Brasil. In: Economia Brasileira em Perspectiva 1996. Rio de Janeiro: IPEA, 1996, p. 421-473.
- BATICH, M & MARQUES R.M. "Aposentados e Pensionistas quantos são e como vivem". **São Paulo em Perspectiva**. São Paulo, Fundação Seade, v.12, n.14, out-dez. 1998, p. 121-128.
- BRAGLIA,M.A.G *et al.*. **Trabalho, desemprego e inatividade: caminhso difíceis para o acesso aos bens sociais**. Caxambu, 1995. (Apresentado no XIX Encontro Anual da ANPOCS).
- BRANDÃO,S.M. & JANNUZZI,P.M. Manifestações de renda e pobreza nos anos 90: uma análise da situação da Região Metropolitana de São Paulo. IV ENCONTRO NACIONAL DE ESTUDOS DO TRABALHO. **Anais** ... São Paulo, ABET, setembro de 1995,p.153-171.
- CEPAL . Magnitud de la pobreza en America Latina en los años ochenta. Santiago-Chile, 1991.
- CYRILLO, D.C. *et al.*. Tendências do consumo de alimentos e o Plano Real: uma avaliação para a Grande São Paulo. **Planejamento e Políticas Públicas**, Brasília, n. 16: 163-195, 1997.

- DINI, N.P. *et al.*. Renda familiar e distribuição de renda na RMSP nos anos 90: evolução conjuntural e seus determinantes. **VI Encontro Nacional de Estudos do Trabalho**, Belo Horizonte, ABET, 1999, pgs. 203:239.
- EKERT-JAFFÉ, O. Standards of Living and Families: Observation and Analysis. Paris: John Libbey Eurotext, 1994.
- FERES, J.C. & LEÓN, A. Magnitud de la pobreza en América Latina en los años ochenta. **Revista de la CEPAL**, Santiago, n. 41, p.139-158, 1990.
- HOFFMANN, R. e KAGEYAMA, A. A distribuição de renda no Brasil entre famílias e pessoas em 1970 e 1980. Anais do 12 Encontro Nacional de Economia. São Paulo: ANPEC, 1984.
- HOFFMANN,R. Desigualdade e pobreza no Brasil no período 1979/97 e a influência da inflação e do salário mínimo. **Economia e Sociedade**, Campinas, 11:199-221, dez/1998.
- ILO. Survey of Living Conditions in Metropolitan Area of São Paulo. Geneve, 1994.
- JANNUZZI, P.M. Evolução da renda e pobreza na Grande São Paulo nos anos 90: Evidências empíricas e outros subsídios para formulação de políticas de combate à indigência. **Pesquisa & Debate**, São Paulo, 12(2):14-43, 2000.
- JANNUZZI, P.M. Renda e estrutura de despesas familiares em São Paulo. In: PATARRA, N. *et al.*. **Migração, emprego e condições de vida**. Campinas, IE/UNICAMP, 1997, p. 319-407.
- MATTOS, F.M. & CARDOSO, J.C. A questão distributiva no Plano Real. Campinas, IE/UNICAMP, mimeo, 1997.
- NERI, M. A evolução da distribuição de renda do trabalho no período 1994-1997: o efeito Grande São Paulo. **Notas sobre o mercado de trabalho**, Brasília, n.4:1-16, 1998.
- POCHMANN, M. Desigualdade dos rendimentos: o que há de novo? Campinas, CESIT, mimeo, 1997.
- RAMOS, C.A. & SANTANA, R. Desemprego, pobreza e desigualdade. Mercado de Trabalho, Brasília, 11:23-28, out/1999.
- ROCHA, S. La pobreza en el Brasil en los anos 80. Revista Occidental, México, 7(3):363-79, 1990.

\_\_\_\_\_, S. Renda e pobreza: os impactos do Plano Real. Revista Brasileira de Estudos Populacionais, Campinas, 13(2), jul/dez, 1996.

- ROCHA, S. & ELLWANGER, R. Linhas de pobreza: alternativas metodológicas a partir de estruturas de consumo observadas. **Planejamento e Políticas Públicas**, Brasília, 9: 227-244, 1993.
- SEADE. Pesquisa de condições de vida: renda. São Paulo, 1992.

\_\_\_\_\_. Pesquisa de condições de vida na RMSP: primeiros resultados. São Paulo, 1994.

\_\_\_\_\_. Pesquisa de condições de vida no Interior do Estado de São Paulo: primeiros resultados. São Paulo, 1999.