INCOME TRANSFER FROM COMMERCIAL AND FAMILY FARMS*

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ABSTRACT - The object of this paper is to determine what differences exist between commercial farms and family farms in the process of income transfer to other Brazilian economic sectors. The effective rates of protection (ERP)[1] for rice, black bean, and milk producers are computed for the period from 1971 to 1995. The results suggest that all studied farms and farm products are taxed. However, income transfer was greater from family farms than from commercial farms over the first 20 years of our study; and those positions reversed with the suspension of credit subsidies in the 1990s.

Key words: Effective rate of protection, subsidy, credit, income.

INTRODUCTION

Over the last 25 years, Brazilian credit and income transfer policies have harmed the country's agriculture sector. During this period, the Brazilian government has also adopted various overvalued currency exchange rates which negatively influenced the economic rules by which agriculture was forced to compete.

Fishlow (1972), Blumenchein (1982), and Teixeira (1994) showed that per capita income was three times higher in the non agricultural sectors than in the primary sector. That imbalance has it origin in import

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[1] ERP is the percentile excess (positive or negative) of the domestic value added, obtained from the imposition of tariffs and/or other methods of intervention in the product and input markets, in relation to the value added at international prices.

substitution, which began to impact the Brazilian agriculture sector in the 1950s and 1960s. The income imbalance was exacerbated in 1968 by government sponsored export incentives and has found continuity in government economic stabilization plans. From the five Brazilian macroeconomic stabilization plans put into effect since 1986, four commenced during the agricultural harvest season when the majority of farm income is generated.

Several authors have identified the transfer of resources from the rural sector to the urban sector. Schiff and Valdés (1995) found that the total taxation of Brazilian agriculture was 8.3% of GDP for the period from1969 and 1983. Those authors conclude that often the objective of direct price interventions was the extraction of agricultural sector resources.

Lopes (1993), researching cotton, soy, corn, rice, and wheat production between 1970 and 1992, found that 40% to 50% of agricultural income is transferred to the coffers of the State through imposition of the Tax on Marketed Commodities and Services (ICMS) and overvaluation of the currency.

While studying the volume of credit used by small and large corn farms between 1970 and 1990, Pires et al. (1995) found that in the 1970s, government policies were causing small farms to effectively transfer 35% of their income to other economic sectors, while the large farms were losing only 27% of their earnings. Though taxation in the entire sector increased in the 1980s, the situation changed: the small farmer's cumulative rate of taxation rate was 44% while large farmer's rate was 66%. This agrees with rural credit policy changes in the 1980s. In 1984, for the first time in 19 years, interest rates on agricultural loans became positive (Goldin and Rezende, 1993). Large farms lost an important source of compensation with the end of credit subsidies.

Income transfer from both commercial and family farms is rarely examined. Evidences, such as food imports, the impoverishment of agriculture, and growing land and income concentration, signaled that discrimination was harming the family farmer. It is necessary to quantify commercial and family farm income transfer to understand the transfer mechanism and the agriculture decapitalization process.

We hypothesize that family agriculture was more highly taxed in the 1970s; if one takes into consideration the family farmer's lack of access to subsidized credit and modern technology. That with the fall of credit subsidies in the 1980s, commercial agriculture lost more through indirect and direct taxation than the family farmer, as commercial agriculture makes use of more highly taxed inputs.

This study intends to determine the amount of resources transferred from Brazilian producers of rice, beans, and milk between 1970 and 1995 and identify the effect of wealth transfer policies on family and commercial farms.

In second section, we detail the methodology used to classify producers, to determine the effective rate, and to determine the income transfer rate. Second section also furnishes the technical production coefficients and the data sources. The results are presented in third section; and fourth section gives our conclusions.

METHODOLOGY

This work is based on the effective rate protection concept, found in the theory of the international trade. The effective rate of protection (ERP) is defined as the proportional increase of the possible value added in a section, due to an entire structure of production and input protection.

According to Cordem (1966) and Balassa (1971), there are a number of basic assumptions governing formulation of the effective rate of protection (ERP): a) the technical coefficients of production are fixed; b) the demand elasticities for exports and the supply elasticities for import are infinite; c) the supply elasticity for inputs not internationally marketed is less than infinite; d) all goods are marketed before and after the interventions, and the distortions caused by exchange rate interference are worthless; e) the magnitude of the applied tariff on imported products corresponds to the difference between domestic and international prices; and f) tariffs and subsidies applied in international trade do not discriminate by country.

ERP, formally defined, is the percentile excess (positive or

negative) of the domestic value added, due to the imposition of tariffs and/or other methods of intervention in the product and input markets, in relation to the value added at international prices, according to the expression (1):

$$TPE = \frac{t_j - \sum_{i=1}^{n} a_{ij}\ t_i}{1 - \sum_{i=1}^{n} a_{ij}} \qquad (1)$$

tj = magnitude of the distortion in the final product's domestic price for domestic producers;

aij = participation of the tradable input, in cost per unit of product j at domestic prices;

ti = magnitude of distortion in domestic input prices for the domestic producer of good j;

We used the ERP to measure distortions faced by producers in the product and input market. The ERP coefficient is based on the value added by unit of product, also called the effective price.

Some points on expression (1) deserve to be highlighted. First, the numerator synthesizes the final result of the distortions faced by the producers; second, all the distortions in output and input prices and exchange rate dis-equilibriumss are captured by the terms tj and ti; third, when the product's nominal rate of protection is the same as the one obtained for all tradable inputs, that is, when tj becomes equal to the sum of the input distortions in the input market, ERP has the same numeric value as the final good TPN; fourth, there are two ways to obtain a negative ERP: when the numerator is negative, implying taxation on production; or when the denominator is negative, which gives a meaningless result.

Use of the official exchange rate in expression (1) above will give the effective rate of protection (ERP). Substituting the equilibrium exchange rate in expression (1) will give the final effective rate of protection (FERP).

This study embraces the years from 1971 to 1995 and is divided into three time periods. The years from 1971 to 1980 constitute the first period; the years from 1981 to 1990, the second period, and the years from 1991 to 1995, the third period. During the 25 years between 1971 and 1995, Brazilian agriculture was significantly influenced by economic policy changes.

The first 10 year period is marked by a change in the equilibrium that had formed between agricultural production growth to supply the domestic market and agricultural production growth to supply the export market. According to Goldin and Rezende (1993), during the decade of the 1970s, export promotion policies and the petroleum crisis contributed to reinforce import substitution. Subsidized agricultural credit eased the expansion of export crop cultures into the south and southeast of the country. According to Homen of Melo (1988), the decade of 1970s represents an important point in the Brazilian agricultural development. In that decade, strong incentives were provided for agricultural modernization and the family farmer's political voice was muted.

The second ten year period begins with decelerated economic growth that continued throughout the 1980s. In 1981, Brazilian GDP declined, the inflation and the payments deficit rose to record levels, and Brazil entered its worst recession since the beginning of the 1930s (Goldin and Rezende, 1993). A large decline in agricultural producer prices, for both in the domestic and export markets, marked the early 1980s. During the decade, minimum price policies took the place of credit subsidization as the governments primary incentive instrument for the agricultural sector.

The third period, 1990 to 1995, is marked by Collar government's liberalization of commerce and the adoption of the floating exchange. It was also a period of sporadic exchange policy adjustments to decrease the degree of government economic intervention in the economy (Almeida, 1995).

For the calculation of the rice and bean effective rate of protection, the inputs considered were sulfate of ammonium, simple super phosphate, potassium chloride, and diesel oil. The costs of Diesel oil protection were used as a proxy measure for distortion in the operational costs of machinery (Santana, 1987).

In this work, we considered that family farms growing rice or bean are all less that 100ha, in doing that we recognize that not every unit within this stratum has all the characteristics of family farms. This stratum probably includes the great majority of family farm properties, in spite of great cultural diversity, unequal distribution of the natural resources, and the disparate effects of agricultural modernization. The main differentiating production factor distinguishing family farms from commercial agricultural producers during the 25 years we studied was the intensity of modern input and agricultural credit use.

The approach we use to rank milk producers is a function of daily production. Family farms produce up to 50 kg/day, all others are considered commercial producers. In the state of Minas Gerais, producers producing up to 50 k/day represent 59% of the total of producers and are responsible for 20% of the state's milk production (Gomes, 1996).

The technical coefficients of production for rice and beans for both commercial and family agriculture were obtained from State institutions (Table 1). For dairy production, the technical coefficients for the commercial producers were obtained from EMBRAPA-(CNPGL), and the technical coefficients for the family producers came from the MGII (primary data) Program.

The similarity in the final effective rates of protection for both commercial and family rice producers may be do to the locale from which the technical coefficients of production were chosen. This limitation in the study would possibly have been less if we had used technical coefficients of production from different regional areas, as the region we used, the South, has climatic and socioeconomic characteristic that create rice production system homogeneity.

Table 1 – Technical coefficients adopted by the family and commercial agriculture

Item	*Family agriculture*		*Commercial agriculture*	
	Unit	Quantity	Unit	Quantity
Rice	kg/ha	4100.00	kg/ha	5000.00
Ammonia	kg/ha	66.00	kg/ha	231.00
Phosphorus	kg/ha	319.00	kg/ha	385.00
Potassium	kg/ha	71.00	kg/ha	76.00
Oil	l/ha	105.00	l/ha	180.00
Black Bean	kg/ha	540.00	kg/ha	1320.00
Ammonia	kg/ha	19.80	kg/ha	215.00
Phosphorus	kg/ha	187.50	kg/ha	375.00
Potassium	kg/ha	17.00	kg/ha	34.50
Oil	l/ha	0.00	l/ha	107.00
Dairy				
Wheat meal	kg/l	0.0151	kg/l	0.0655
Coarre grain	kg/l	0.0041	kg/l	0.2830
Cotton meal	kg/l	0.0079	kg/l	0.0508
Soy meal	kg/l	0.0005	kg/l	0.0015

Source: Franco, 1998. PF=Family Producer, PC=Commercial Producer; kg/ha = kilogram per hectare; l/ha = liter per hectare; kg/l= kilogram per liter.

Domestic and international producer prices were compared for the rice, beans, and milk. The regions selected for the price study were chosen as a function of their importance in the production and commercialization of the referred product. Rice price comparisons came from the southern region of the state of Rio Grande do Sul (RS); black bean prices from the city of Irati-in state of Parána (PR), and milk and milk product prices from Colonel Pacheco, home of the National Center for Dairy Research - CNPGL - EMBRAPA and the state's governor Itamar Franco, Juiz de Fora, Minas Gerais (MG). Domestic prices were obtained using information from the three institutions: DERAL-PR (black bean), IRGA-RS (rice), and CONAB (milk type C). The international prices (CIF) were obtained from the International Trade Foundation - FUNCEX.

This study considered credit obtained from official institutions; credit interest rate information was supplied by the Central Bank of Brazil.

Investment and commercialization [marketing] loans were not taken into account. In the agricultural credit subsidy or tax calculations, an inflation measure (IGP-DI) was compared with the loan interest rates (Mata,1982) and (Pires et al., 1995). Thus, a subsidy will exist if the charged interest rate is less than inflation rate at the time the loan was made.

The methodology used in equilibrium exchange rate calculations is based on the parity purchase power theory. Estimates of the shadow price of foreign currency, using figures from the World Bank (1981, p. 137-40) and the Brazilian and American wholesale price indices, were made according to the expression:

$$E_{nt} = e^{*}_{80}((IPA^{Br}_{n} / IPA^{Br}_{80}) / (IPA^{EUA}_{n} / IPA^{EUA}_{80}))$$

Ent = estimate of the rate of exchange equilibrium for year t;

e*80 = shadow price of foreign currency in 1980; and

IPA = wholesale price index

American IPA was used in place of an index for the international currency market to simplify calculations. The United States of America is one of Brazil's most important commercial partners, due to both its imports and exports of agricultural products and its export of fertilizers and other inputs to Brazilian agriculture.

RESULTS AND DISCUSSION

ERP and FERP for Rice

The results of the effective rate of protection calculations indicate strong discrimination against rice and bean growers. The average ERPs are negative for both commercial and family farm producers (Table 2).

The ICMS was the most important factor reducing the domestic rice producers value added. The rural credit subsidy only compensated the commercial producers for losses due to ICMS taxation in 1979. In the same year, family producers received just 32% of their ICMS taxes by means of the rural credit subsidy.

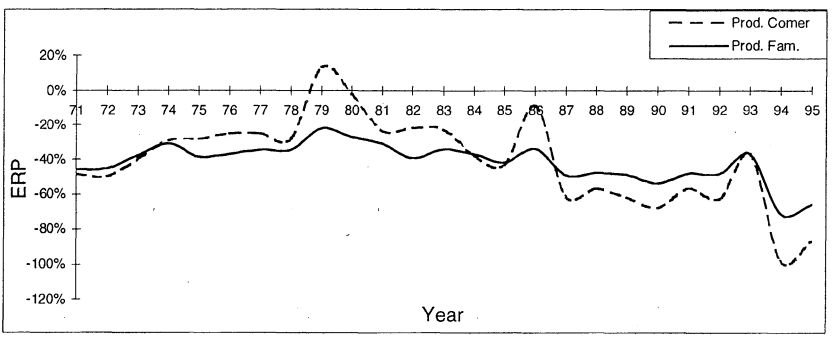
Table 2 – ERP and FERP for commercial and family farms

Average by period	ERP		FERP	
	P. F.	P. C.	P. F.	P. C.
Total	-41,71	-40,42	-63,39	-60,23
1971-80	-35,43	-26,39	-56,74	-48,77
1981-91	-41,74	-40,61	-58,52	-55,87
1991-95	-54,19	-68,11	-86,41	-91,88

Source: Franco, 1998. PF = Family Farm, PC = Comercial Farm.

In almost every year, commercial producers were taxed for the use of fertilizers and diesel oil. As commercial producers use these inputs more intensively than family farmers, the distortion caused by economic policies affecting diesel and fertilizer prices is monetarily larger for commercial producers. On the other hand, commercial producers used subsidized credit more intensively. From 1974 to 1986, except for 1985, the commercial producers were less discriminated against, or more protected, than family producers (Figure 1), due to the easy availability of subsidized, low interest, loan money,. From 1987 until 1995, credit was tightened and the opposite occurred.

Figure 1 - ERP for commercial and family rice producers.



Source: Franco, 1998.

It is important to remember that economic policies distorted prices; they can create credit subsidies or taxes on inputs and production. Given the closeness the values of the two farming systems technical coefficients of production (Table 1), rural credit becomes especially important in any explanation of rice and bean ERPs.

FERP is obtained by when the equilibrium exchange rate is used to convert input and product prices to those in international market. Therefore, the exchange distortion in the product price, in the Brazilian case, acts discriminatorily against the domestic producer. The exchange distortion of the input prices, as a subsidy to the consumer of the imported input.

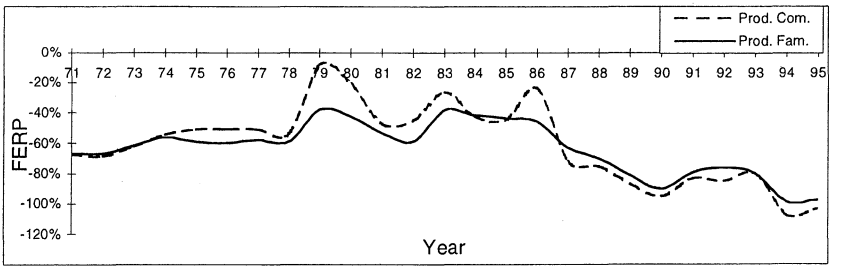
In the first period (1971-80), the commercial rice producer's average tax was 48.77% of income; and the family rice farmer's average tax was 56.74% of income (Table 2). The incident of taxation for each type of producer are quite close, which comes from the exchange rate distortion, the ICMS, and petroleum consumption taxes. Producer subsidies came through credit policies, not too important over the first four years of the study, from the fertilizer consumption subsidy, and from the overvalued exchange rate that reduced imported input prices.

In the second period (1981-90), discrimination against rice producers continues to be biased against the family farm. The period'average FERP is –55.87% for the commercial producer and –58.52% for the family producer. In the first three years of the second period and in 1986, the family farmer was the more highly taxed producer group (Figure 2). In those years, the large subsidy implicit in rural credit policy reduced the commercial producer's exposure to government taxation.

Until 1988, the ICMS was the most important factor reducing value added by domestic producers. When the exchange rate overvalued Brazilian currency by more than 40% in 1989, exchange distortion became the more important influence on value added than ICMS induced costs.

In the last period (1991-95), taxation is the highest. The average FERP is –91.88%, for the commercial producer and –86.41% for the family producer. The growth found in this period's FERP is explained, mainly, by the increasing overvaluation of Brazilian currency.

Figure 2 - FERP for commercial and family producer of rice



Source: Franco, 1998.

ERP and FERP for Black Beans

The first period's average FERP is –37.24% for the family farmer growing black beans and -34.12% for commercial, black bean producers (Table 3). The factors that explain these FERP numbers are the rural credit policy, the subsidy for the use of fertilizers, and more importantly, the ICMS and the overvalued exchange rate.

Table 3 – ERP and FERP for commercial and family black bean producer

Average For Periods	ERP		FERP	
	P. F.	P. C.	P. F.	P. C.
1971-95	-22,16	-29,64	-39,80	-40,42
1971-80	-18,84	-17,83	-37,24	-34,12
1981-91	-19,23	-19,60	-36,07	-35,41
1991-95	-34,66	-73,31	-52,39	-63,01

Source: Franco, 1998. PF = Family Producer, PC = Commercial Producer.

In the second period FERPs were on average –36.07% for the commercial producer and -35.41% for family farmer. The FERP results broadly parallel the ERP results, as they both are greatly affected by the years of high credit subsidy, 1981/83 and 1986, which lowers the price of

money, a commodity used more by commercial producers than family farmers.

They average FERP for the third period is –63.01% for the commercial producer and –52.39% for the family farmer. In this period, there is growth in the amount of income that the producers transfer out of the agriculture sector.

When one takes into consideration both the effective rate protection (ERP) and the official exchange rate, the ICMS was the most important factor reducing value added by black bean producers. When considering the equilibrium exchange rate, (FERP), the exchange rate distortion and the ICMS alternated as the most important levy on producers. Figure 3 illustrates the overvalued exchange rate's effect on family, black bean producers.

ERP and FERP for Dairy Product Producers

For the entire 25 year period, the average ERP is –7.49% for family dairy producers and 32.25% for commercial dairy producers (Table 4).

Table 4 - ERP and FERP for commercial and family producer of milk.

Average for Periods	ERP		FERP	
	P. F.	P. C.	P. F.	P. C.
Total	-7.49	32.25	-34.13	16.69
1971-80	-6.60	101.63	-30.06	82.10
1981-91	-8.91	-18.32	-28.67	-22.17
1991-95	-6.44	-5.38	-53.19	-36.42

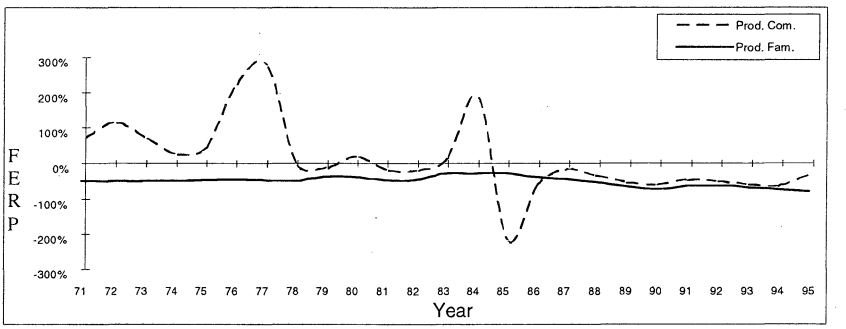
Source: Franco, 1998. PF = Family Producer, PC = Commercial Producer.

Distortions caused by exchange rate fluctuations were very consistent in their affect on family dairy farm income during the whole period (Figure 4).

The overvalued Brazilian currency decreased the value added by milk producers. Average FERP for the whole period is –34.13% for

family dairy farms and 16.69% for commercial dairy farms. When compared with the ERP results, the FERP results show the increase in family producer's level of taxation caused by currency overvaluation.

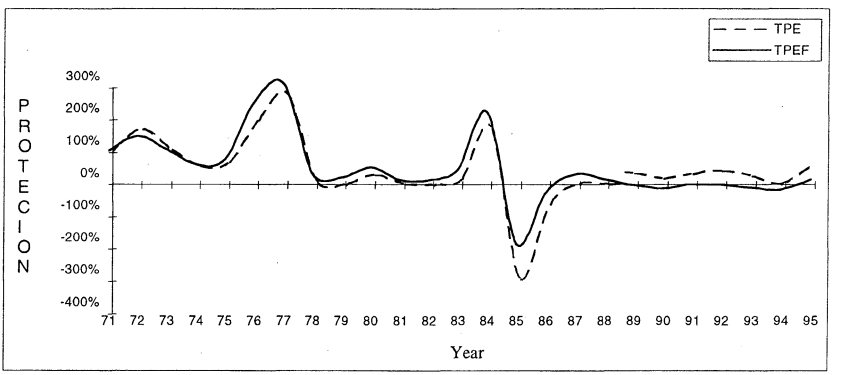
Figure 4 – FERP for commercial and family dairy producers



Source: Franco, 1998.

Over the entire study period, average, commercial producer, levels of protection decreased. The average for the entire period should be viewed caution because of the very the very high rates of protection found in some years of the first period. The commercial producer was actually taxed in 15 of the 25 years of the studied (Figure 5).

Figure 5 – ERP and FERP for Commercial Producer of Milk



Source: Franco, 1998.

The average FERP in the first period was –30.06% for family dairy farms and 82.10% for commercial producers. The two factors most influential in reducing the domestic value added were the ICMS and exchange rate distortion.

Second period average FERP was –22.17% for commercial producers and -28.67% for family producers; both suffer transfer of income, but taxation is larger on the family producer.

The average of FERP for the third period was –36.42% for commercial producers and -53.19% for family producers. Discrimination against dairy producers increases in this period, due to growing Brazilian currency overvaluation. The subsidy of imported feed was an important factor compensating commercial dairy producers for taxation. Agricultural credit is not an important factor explaining the results, because the amount of producer credit used by milk producers is not expressive.

Analyses of the data from Franco (1998) indications that the variations observed in the effective rate of protection for some years are probably due to the small absolute size of the value added. As value added is the denominator of the final FERP expression, the results from equations in which the value added is very small should be viewed with caution.

CONCLUSION

In the study's first two ten year periods, the transfer of income away from family producers of rice and beans is more intense than the income transfer away from commercial producers. That is reversed in the study's third period, which agrees with the hypothesis that subsidized credit benefited commercial producers to the detriment of family producers. The credit subsidy was incapable of compensating rural producers for the prejudices imposed by the country's economic policies. These policies substantially decreased this Brazilian productive systems' profitability, reducing quality of life in the rice and bean fields.

Agricultural credit has had significant impact on the results from the rice and bean segments of this study. During the years of high, rural

credit subsidies, the commercial producer was systematically taxed less than the family producer. In years with positive, loan interest rates, the use of agricultural credit reduced the value added by commercial producers; however, as credit volumes in that period are smaller, credit's impact is also smaller.

This study's rice and bean findings fit with the null or low growth of rice and bean production found in the 1970s and 1980s. The study also verified that owner capacity for investment was severely harmed in those two decades. These data support the theory that productive resources tend to migrate to the activities with higher effective rate of protection levels (Cordem, 1966).

When ERP was calculated, the main factor discriminating against producers was the ICMS; when FERP was calculated, the ICMS and exchange distortion alternated in importance. The products under study are the mainstays of lower income consumers. Future studies to quantify the effect of reducing or exempting basic foodstuffs from incident ICMS will have to examine the effect on producer and consumer expenses, from both an economic and a humane level.

Family dairy farmers were more taxed than the commercial producers over the whole study period and in the averages of the three time segments. The average FERP for the whole period was 16.69%, for the commercial producer and –34.13% for the family producer. The family dairy farm was forced to transfer an disproportionate portion of his/her income outside the sector, over 50% more than the commercial dairy farm.

Rural credit was shown to an unimportant variable affecting milk production and dairy farm value added, probably because the activity requires low credit volumes. Conversely, the price of animal feed was an important source of distortions, which implies taxation and subsidy programs impact commercial and family, milk producers differently. The animal feed subsidy, an overvalued currency, compensated the commercial milk producer for many of his losses to ICMS taxation; this cannot be said for the family dairy farmer.

In general, for rice, beans, and milk, all infrequently exported commodities, the overvalued exchange rate has an important impact,

depressing internal prices and favoring imports. As domestic prices decrease to meet foreign competition, domestic producer incomes are reduced. An overvalued currency exposes domestic producers to imports that have been subsidized through that exchange rate and that reflects agricultural sector competitiveness and profitability. Exchange rate fluctuations generate pricing and revenue uncertainty and instability. In the period between 1977 and 1984, Brazil's rice and black bean markets showed some of the largest revenue instability to be found in the country (Homem de Melo, 1988).

An attempt should be made to correct the inequality between commercial and family farms in the distribution of income and financing before the next growth cycle begins, so that all parties can reap the benefits. Modernization programs directed toward family agriculture, such as PRONAF (The National Family Farm Enhancement Program), are welcome. Brazil needs an national agricultural policy that has clearly defined objectives and strong income support provisions.

REFERENCES

BALASSA, B. (Coord.). **The structure_of protection in developing countries**. New York, The Johns Hopkins Press, 1971.

BLUMENSCHEIN, F. N. **Uma análise da proteção efetiva na agricultura do estado de São Paulo**. Piracicaba/ESALQ. 1982, 149p. (MS Dissertation).

CORDEN, W. M. The estruture of a tariff systm and the effective protective rate. **American Journal of Agricultural Economics**, 74(3): 221-37, june 1966.

FISHLOW, A. Brazilian size distribution of income. **American Economic Review**. LXII, (2). May,1972. New Orleans. p.391-402

FRANCO, J. M. C. **Transferência de renda da agricultura comercial e familiar no Brasil**. Viçosa. 1998, 145p. Universidade Federal de Viçosa. Janeiro, 1998. (MS Dissertation).

GOLDIN, I. and REZENDE, G. C. de. **A Agricultura Brasileira Na Década de 80: Crescimento Numa Economia Em Crise.** Brasília: IPEA, 1993. 119p.

GOMES, S. T. Afinal, qual é a produtividade de nosso rebanho leiteiro? **Balde Branco**, São Paulo, ano 32, n. 378, p.32-35, abr. 1996.

HOMEM DE MELO, F. de. Diagnóstico Macro. In: AGUIAR, M. de N. (Org.) **A questão da produção e do abastecimento alimentar no Brasil.** Um diagnóstico macro com cortes regionais. Brasília, DF: IPEA/IPLAN, 1988. p.9-59.

LOPES, I. Q. V. Uma política de garantia de renda para o Brasil. In: TEIXEIRA, E. C. (Ed.) **A política agrícola na década de 90**. Viçosa, M.G., UFV, Imprensa Universitária, 1991, 252p.

LOPES, M. R. O poder das coalizões políticas de grupos de interesse de bloquear o desenvolvimento agrícola. In: **TEIXEIRA, E. C. (Ed.). Desenvolvimento agrícola na década de 90 e no século XXI.** Viçosa, M.G., UFV, Impr. Univ., 1993, 219p.

MATA, M. DA. Crédito rural: caracterização do sistema e estimativas dos subsídios implícitos. **Revista Brasileira de Economia**, 36(3):215-45, jul./set. 1982.

PIRES, M. M. et al. Efeitos de políticas governamentais na cultura do milho - Brasil, 1970 a 1990. In: **Anais do XXXIII congresso brasileiro de economia e sociologia rural**. Curitiba, Julho/ Agosto de 1995. Vol. I, p.350-366.

SANTANA, C. A. M. Efeitos das políticas econômicas brasileiras sobre o setor doméstico de soja em grão. **Pesquisa e Planejamento Econômico**. Revista do Instituto de Planejamento Econômico Social., 17 (3). p.633-678, dez. 1987.

SCHIFF, M and VALDÉS, A. The plundering of agricultural in África, Asia and Latin American. In: TEIXEIRA E. C. and AGUIAR, D. R. D. (Editores). **Comércio Internacional e Comercialização Agrícola**. Viçosa, M.G., UFV, Impr. Univ., 1995. 328p.

TEIXEIRA, E. C. Política econômica e o combate à fome. **Conjuntura Econômica**. 48, (9), Set/1994. FGV, Rio de Janeiro.