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AGRICULTURAL LABOR MARKET LEGISLATION AND POVERTY IN BRAZIL: A TRANSACTION COSTS APPROACH

Gervásio Castro de Rezende (Ipea and Uerj) Ana Cecília Kreter (UFF and Ipea)

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AGRICULTURAL LABOR MARKET LEGISLATION AND POVERTY IN BRAZIL: A TRANSACTION COSTS APPROACH *

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RESUMO - O setor agrícola brasileiro tem desempenhado um papel estratégico ao contribuir para uma adequada oferta de alimentos e de matérias primas e para um crescimento rápido das exportações. Entretanto, a produção agrícola tem-se baseado, crescentemente, em tecnologias intensivas em capital e em trabalho qualificado, com fraca absorção de mão de obra não-qualificada, que é o fator abundante na economia. Este trabalho propõe uma explicação para esse padrão inadequado de nosso crescimento agrícola, argumentando que esse padrão tecnológico começou na década de 1960, e foi resultado das políticas trabalhistas, fundiárias e de crédito agrícola instituídas naquela década. Mostra-se que essas políticas, embora adotadas com o objetivo explícito de beneficiar o pobre, na realidade atingiram resultados opostos, contribuindo para o aumento da pobreza e da desigualdade no Brasil. O artigo focaliza, especialmente, a política trabalhista agrícola e, embora admitindo a importância dos "encargos trabalhistas", especialmente sobre a agricultura familiar, dá mais ênfase aos "custos de transação" decorrentes dessas políticas. O artigo propõe, na realidade, que esses "custos de transação" devem ser mais importantes do que os "encargos trabalhistas" para a explicação dos problemas de pobreza e desigualdade associados ao processo de desenvolvimento agrícola. O trabalho termina propondo uma desregulamentação dos mercados de trabalho e de terra, de tal maneira que os contratos entre as várias partes nesses mercados possam ser assinados de uma maneira muito mais livre do que atualmente. O trabalho também propõe uma redução drástica no subsídio ao crédito rural, assim como uma mudança na legislação (inclusive na própria Constituição Federal), que impede que o pequeno agricultor possa ter acesso ao sistema financeiro privado.

Palavras-chave: Legislação trabalhista agrícola. Crédito Agrícola. Mecanização Agrícola.

ABSTRACT – The Brazilian agricultural sector has played a strategic role in its capacity to contribute for an adequate domestic supply of food and raw materials and for the fast increase in exports. However, agricultural production has increasingly been based on techniques intensive in the use of capital and qualified labor, leading to low absorption of non-qualified labor, that is the abundant factor in the economy. This paper proposes an

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explanation for this inadequate feature of our agricultural development, arguing that this pattern of agricultural growth started in the 1960s, and has been caused by the agricultural labor, land and credit policies instituted in that decade. It is shown that these policies, even though adopted with the avowed purpose of benefiting the poor, actually reached the opposite results, contributing for the increase in poverty and inequality in Brazil. The paper focuses, especially, the agricultural labor policy and, while pointing out the negative role played by the so-called "labor surcharges", especially on family farming, it gives more emphasis on the "transaction costs" associated to these policies. The paper proposes, actually, that these "transaction costs" may be even more relevant than the "labor surcharges" for the explanation of the problems faced by the agricultural labor market in Brazil. The paper ends up proposing a deregulation of the agricultural labor and land markets, in such a way that contracts may be signed up much more freely between the several parties involved. The paper also proposes a sharp reduction in the subsidy to rural credit, as well as change in the legislation (including the Federal Constitution), that prevents the small farmer from having access to the private financial system.

Key words: Agricultural labor legislation. Agricultural credit policy. Agricultural mechanization.

JEL Classification: J43, Q14, Q15.

AGRICULTURAL LABOR MARKET LEGISLATION AND POVERTY IN

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1 - Introduction

The agricultural sector has played a strategic role in the present phase of the Brazilian economy, due to its capacity to contribute to an adequate domestic supply of food and raw materials and for the increase in exports. However, agricultural production has been characterized, increasingly, by a technology intensive in capital and in qualified labor, as well as by rising scale of production in several sectors.

In view of the magnitude of the present problem of poverty and inequality in Brazil, it must be explored the possibility that the agricultural sector could change its current pattern of growth, in a way more consistent with improved distributive patterns. This would require a technological change with the purpose to absorb more of a type of labor considered today little qualified in the economy as a whole, but that could acquire, at a relatively low cost, the qualification required for this new pattern of agricultural technology.

Note that, as shown by Alves, Mantovani & Oliveira (2005), the current agricultural technological pattern has led to the absorption of a significant volume of labor power, both in the rural and in the urban worlds, but it is predominantly qualified labor, which is scarce in Brazil. Ferreira Filho (2005) also showed such absorption of qualified labor in the agricultural sector, especially in the most dynamic regions. The technological change sought in this paper, however, would have for objective to increase the absorption of *non-qualified* labor, which exists in abundance in our economy.

This new contribution of agriculture would seem feasible, in principle, due to the greater flexibility in the choice of technology in the agricultural sector, as shown by the diversity of agricultural technological patterns that exist in the world. This worldwide

diversity of technological patterns has led, by the way, to the theory of agricultural development known as the "induced technological change model", by Hayami and Ruttan (1985). According to this theory, the agricultural technology adopted in the several countries is actually very diverse, because the relative factor prices in the several countries are also very diverse.

In contrast, the qualification required for this labor-intensive agriculture — to be called here the *agriculture-specific qualification* —, is simpler, capable of being formed at a cost much smaller than the qualification required for the industrial sector and, also, for the modern agricultural sector itself. Furthermore, as an eventual growth of agricultural employment would favor the growth of rural areas and small towns, this would contribute to a lessening of the social problems presently faced by the metropolitan areas, which are the main destination of the workers that migrate from the agricultural sector.

Note that the labor force that migrates from the agricultural to the other sectors of the economy, generally in the urban world, ends up by losing this condition of qualified labor (in the restricted sense adopted here), becoming, suddenly, unqualified labor *tout* court, it being very likely that this contributes, in a disproportionate way, to the growth of poverty and inequality in Brazil.

It would be interesting, therefore, to understand better the reasons that have led the agricultural sector in Brazil to adopt the present technological pattern, since this knowledge is necessary for the proposal of measures that guarantee that agriculture keeps growing, as currently, but becomes capable of absorbing more labor, specially of the kind that is abundant in Brazil, that is, of low qualification.

¹ For agriculture-specific qualification, it is intended here to mean qualifications such as the knowledge of the agricultural calendar, the physical capacity and the knowledge necessary to the manual cut of cane, the "harvest" of coffee, the handling of the "hoe" and the "sickle", the handling of animals, etc.

In this respect, it should be noted that there is an intense controversy over the causes of this concentrated pattern of Brazilian agricultural growth. The first current blames our historical formation, and in particular the concentration of landownership, whose determining role would have been strengthened, in the more recent period, by the subsidized agricultural credit policy, instituted in the decade of 1960.

The second current sees this pattern of agricultural development as a consequence of a "technological imperative", since small-scale production would not be feasible in agriculture, and it would not exist agricultural technology capable of absorbing labor in the way that it would be necessary in Brazil. Therefore, Brazilian agricultural technological pattern and the growing predominance of large-scale agriculture would be somewhat "natural", and any attempt at interfering in this process o agricultural growth would imply an efficiency loss to the economy.

This paper seeks not only to criticize these two ways of thinking, but also to propose an alternative explanation. Contrary to the authors that seek to find in our remote past the explanation of our present-day problems, this paper will argue that the current situation was created by a process of transformation that began in the decade of the 1960s, and that was very much conditioned by the agricultural labor, land and credit policies, all of them instituted, not by chance, in that decade. It will be argued that these public policies, and in particular the agricultural labor and land policies, even though adopted with the avowed purpose of benefiting the poor, actually reached the opposite results, contributing, since then, to the increase of poverty and inequality in Brazil.

On the other hand, the critique of the authors that postulate a technological determinism will be based on *mainstream* economic theory itself, which supposedly serves as basis for their argument. It will be argued that the technological pattern prevailing today was the result of choices that had for basis the relative factor prices, but

prices that, instead of reflecting the "natural" factor endowments, were "distorted" as a result of the operation of the public policies mentioned before. In other words, as a result of these policies, the private cost of labor (the cost of labor from the point of view of the employer) became much greater than the social cost of labor (the wage effectively received by the worker), while the private cost of capital (the cost of capital from the point of view of the farmer) became much lower than its true social cost, given by the economy's marginal productivity of capital. The choice of the current technology was, therefore, conditioned – not to say *determined* – by these distorted relative factor prices. In addition to that, new technology was also created or "induced", according to the Hayami and Ruttan (1985) model, by this increase in the relative price of labor *vis-à-vis* capital.

Now, to the extent that one accepts that the present technological pattern is a result of a technical choice conditioned by relative factor prices, it can be inferred, then, that an eventual change in these relative factor prices could lead to a new pattern of agricultural development, with the use a technology much less intensive in capital and more intensive in this cheaper labor, endowed with (or capable of being endowed with) the agriculture-specific qualification. The agricultural sector would add to its present contributions another one, perhaps even more important, that is the creation of jobs that would end up contributing for the reduction of poverty and inequality in Brazil.

In this specific paper, however, we will limit ourselves to the analysis of the labor policy.² In addition to this Introduction, this paper includes other 6 sections. The next section points out the problems that arise in the agricultural labor market in Brazil, due to the seasonality of agriculture as well as to the labor market legislation. It is proposed that these labor market problems affect negatively more the small farmers.

² For an analysis of the two other policies mentioned above, see Rezende (2006).

Section 3 discusses more deeply the characteristics of the seasonal agricultural labor market, taking for basis a fieldwork conducted on the sugar cane industry in São Paulo. Thanks to this case study, that included several interviews with the main agents involved, it became possible to understand better the role of the *empreiteiro* in Brazilian agriculture, how he arises and what kind of functions he actually performs. It is shown that this *empreiteiro* plays the same role as the "labor contractor" in the United States. While pointing out the similarities, this Section 3 also stresses the differences between these economic agents in these two countries, due to the fact that agricultural labor market legislation in Brazil is much more interventionist, leading to much higher costs of contracting and firing a worker, especially for short periods of time.

Section 4 expands on this analysis of the *empreiteiro*, discussing in detail the legislation that has served as a basis for declaring the *empreiteiro*'s activity illegal. According to this legislation, the *empreiteiro* cannot be the *direct* contractor of labor, this being a sole attribute of the farmer. This section shows, however, that this legislation is not relevant for the case of the *empreiteiro*, so that it cannot be used to prohibit the labor contracting by the *empreiteiro*.

Section 5 proposes a theoretical framework that allows a deeper analysis of the issues raised in this paper. It is presented the standard labor market analysis of the "wedge" created by the labor laws. This "wedge" is formed by the difference between the full cost of labor for the employer and the net income actually received by the worker. Informality in the labor market, according to this literature, corresponds to the extreme case when the obedience to the labor laws would imply that net income received by the worker should fall below the minimum wage, going against, therefore, a major labor law, that establishing minimum wage. This section extends this standard labor market analysis, proposing that, in this extreme case of labor market informality,

the analysis should consider that a new kind of costs take place – the "transaction costs", derived from the illegality of the situation. Finally, this section also explains how differently the labor laws affect the agricultural and the non-agricultural sectors in Brazil.

Section 6 also uses the transaction costs approach in order to criticize the widespread belief on the existence of "slave labor" in Brazilian agriculture. It is proposed that some form of restriction on the worker's movement, once he is taken to the farm, may actually take place, especially in some remote areas of Brazil. This fact would be caused, however, in the final analysis, by our labor legislation itself, and not by the *latifundio*, as it is usually believed.

Section 7, finally, presents a summary and the main conclusions of the paper.

2 – Agricultural Labor Legislation and its Negative Impacts on Family Farming in Brazil

As a consequence of the seasonality that typifies agricultural production, the agricultural wage labor market is to a large extent temporary, what gives rise to the following problems: a) low qualification of the labor force, since there is no incentive, both from the point of view of the employer and of the worker, to invest in the qualification of labor, due to the high turnover; and b) uncertainty with respect to the supply of labor, sometimes as a problem of information, since the workers, many times, live in distant regions. This last problem is especially serious in continental countries, like Brazil and the United States.³

It should be noted that this seasonal labor market is also very inadequate from the point of view of the *principal* family workers, since it offers work only in some epochs

³ Just to have an idea of the importance of this issue in the United States, see Emerson (1984).

of the year, and even so in a uncertain manner.⁴ However, what is a disadvantage for one type of worker becomes an advantage for other. This is the case of the family farmers of poor rural areas in Brazil – as seen, for example, the Northern Minas Gerais and the Brazilian Northeast –, since this seasonal labor market offers an alternative of work that is *complementary* to their own agricultural production. This employment alternative is especially relevant in view of the fact that the gain derived from wage labor does not bear the risk that self agricultural production implies.

Note that the seasonal labor market can be very important for the *secondary* family worker, too. Thus, since this temporary agricultural labor market is a source of income for social groups that are situated at the margin of absolute poverty, it is very important to prevent that this market disappears.

This seasonal agricultural labor market presents these same problems all over the world. As a consequence, an international literature arose that sought to attribute the competitive advantage of family farming, in the developed countries, to the fact that the family farm is less dependent on this agricultural labor market, since it is endowed with a self-supply of labor. Besides, the limited endowment of this self-supply of labor does not prevent this form of production from reaching the optimal scale of production, due to its facilitated access to credit, what allows mechanization, especially in the activities of planting and harvesting. Family farming is also, in general, more capable of

⁴ Rezende (1985, pp.58-60) noted, in effect, that the *volante* worker (literally, "moving worker"), that had left the farms in the late 1960s and early 1970s and went to live in the periphery of the cities, but still derived most of their income from agricultural work, was composed, basically, of women, children and the elderly. The principal family workers tried to avoid this form of agricultural employment, due to its seasonality.

⁵ According to Sanders & Ruttan (1978, p.283), "Obtaining and using seasonal labor is much more difficult for the large than for the small farm unit because the latter is better able to rely on family labor". Mann & Dickinson (1978) also stress this advantage of family farming vis-à-vis capitalist agriculture.

diversifying its activities – reducing, therefore, the seasonal peaks of labor requirement –, not to mention the lower supervision cost, a problem generally considered more important in agriculture than in industry.

Contrary to what has happened in the developed countries, however, family farming in Brazil ended up being more adversely affected by the peculiarities of the agricultural wage labor market. This is due, in part, not only to the high cost of the contracted labor in Brazil – a consequence of the labor legislation, as it will be seen later –, but, especially, to the fact that family farm in Brazil has not had, as a rule, access to credit and, consequently, to mechanization.

In order to understand why family farming has been affected in such a particularly adverse form by our labor policy, it suffices to consider that the obedience to the labor legislation imposes fixed costs relevant to the employer, such as the following ones (only to give some examples): a) to keep himself informed about the legislation, or to hire an accountant for this purpose; b) to have to go to the bank and open individual accounts to regularize the employees' situation by the National Institute of Social Security (INSS), and go back other times and to make the monthly deposits for INSS; c) to maintain up-to-date the register for each employee, even if each one of them has worked only some days; d) to take the employees to the city in order to find a physician entitled to make entrance examination and, afterwards, the demissional examination.

In addition to spending time and money in order to fulfill the labor legislation requirements – at an obvious cost for his productive activity – the family farmer has also to fulfill a series of requirements relative to the worker security, as described in detail in Teixeira, Barletta & Lemes (1997).

⁶ In an article entitled "A CLT no Meio Rural", published by the newspaper *O Estado de São Paulo* (07/25/06, p.B2), Professor José Pastore points out that the labor legislation "makes the employers' life hell", due to the stringent (and expensive) requirements of job security.

It is these administrative costs, to a large extent invariant with the size of the labor force — being, therefore, fixed —, that end up making that the unit cost of labor be not only high, but also much higher for the temporary worker than for the permanent worker, and, within the group of employers, for the small farmers than the larger ones. The small farmers, too, in the case of being fined for not obeying the labor laws, can reach the point of losing his farm, due to the arbitrary fines imposed by the Labor Justice. This "labor risk", of course, must also be considered a fixed cost, whose amount and whose probability of occurrence vary from farmer to farmer, it being certain, however, that this must affect more the small rather than the large farmers.

While bearing a higher cost for hired labor, the family farm in Brazil, contrary to what happened in the majority of the capitalist countries, could not adopt mechanization, due to the restriction of access to credit. Note that this restriction is higher exactly in the case of investment credit, that is, the credit required for the acquisition of agricultural machinery and equipments. Family farm, in Brazil, loses, in this way, competitiveness *vis-à-vis* the capitalist agriculture, for two reasons: first, for having to face a higher cost for hired worker; and second, for not being able to overcome, through mechanization, the restrictions and uncertainty that temporary wage labor imposes in the phases of planting and harvesting.

The reasons that explain the lack of access to credit on the part of the family farm in Brazil are discussed in greater length in Rezende (2006). They have to do not only with the well-known problems related to the precariousness of access to the land on the part of these producers, but also to the restriction that the Federal Constitution imposes on the cession of the small farmer's land as collateral in financial transactions. This restriction hits even those farmers that supposedly had solved their access-to-the-land problem, namely, the agrarian reform beneficiaries. As a matter of fact, the Brazilian

Federal Constitution imposes that these agrarian reform beneficiaries do not receive the property title, but only a title of *dominium* or "concession of use", non-negotiable for ten years. In any case, in view of the limitation imposed upon the use of this titled land as collateral in financial transactions, these beneficiaries end up losing their interest in acquiring such a property title, since in this case they would lose a series of benefits that the government keeps providing *ad eternum* to these agrarian reform beneficiaries. These farmers, consequently, never become truly independent farmers, the "homesteaders" so much dreamed of by the creators of the Land Statute, in the early 1960s.

3 - Seasonality in Agriculture and the Role of the *Empreiteiro*: An Analysis Based on a Case Study of the Sugar Cane Industry in the State of São Paulo, Brazil

Due to the difficulty of communication between the two sides of this temporary labor market, there arose the intermediary, more known as the "empreiteiro", which normally detains the information on the two sides and acts facilitating the operation of this market. Actually, this empreiteiro performs the same role as the "labor contractor", object of analysis of Vandeman, Sadoulet & De Janvry (1991), in their study of the Californian agricultural labor market.

As a matter of fact, direct contracting of seasonal agricultural workers by individual farmers is a particularly difficult task in Brazil, especially in view of the fact that many workers are seasonal migrants from distant regions. Since they cannot bear the trip's costs (including initial expenditures in the place of destiny) plus the advances left with their families, the costs of their contracting are very high, especially if borne entirely by a single farmer. In addition to high contracting costs, this seasonal

agricultural labor market also presents serious selection problems, which become even more serious in Brazil due to our high costs of hiring and firing the worker, especially when considering short periods of time (three to four months).

This problem is being solved, in Brazil and elsewhere, through the contracting of intermediaries to perform the needed task (cane cutting, for instance) with a labor force directly hired by them, and using their own machinery and everything else that is necessary to perform the operation. This intermediary also performs the function of labor supervisor, a crucial problem in agriculture; in this respect, it should be pointed out that the adoption of the piece-rate system of payment to the worker (payment according to the amount of cane cut) is a system designed precisely to economize on supervision costs, since this system stimulates the worker to work harder and without supervision. In this way, all the problems related to the selection and supervision of labor are borne by the intermediary, of course at a price previously set with the farmer. In this way, there are two markets at work: the labor market, involving the workers and the intermediaries, and the empreitada market, involving the farmer and the empreiteiro. Considering the well-known problems related to selection and supervision of labor in agriculture, one can appreciate how important it is the role played by this intermediary, relieving the farmer from having to deal with all these problems.

It is interesting to note that the American "labor contractor" performs the same role as the *empreiteiro* in Brazil; indeed, according to Glover (1984, p. 259), the "labor contractor" in the United States "relieves the grower of many burdens. [He] recruits and transports and supervises workers in the field. He also instructs workers. He keeps

⁷ A detailed characterization of this kind of intermediary was first presented in Terci et alii (2005), and has benefited afterwards from field works, as reported in Kreter (2007) and Guedes (2006).

⁸ Note that this piece-rate payment system also leads to the choice of younger, stronger males, who tend to live in poorer, rural areas, such as the Jequitinhonha Valley, in Northern Minas Gerais.

⁹ For a detailed discussion of the way it is formed this price of the sugar-cane cutting paid by the sugar mill to the *empreiteiro*, see Kreter (2007).

records and pays workers and payroll taxes. Often, he provides workers with food and lodging. He supplies drinking water and field toilets and may supply some implements of harvesting such as gloves, ladders, or clippers. He also is obligated to carry insurance. He may extend credit to workers or help them with personal problems."

Of course, the American labor contractor is able to do all that thanks to a parallel contract with the grower, fixing, now, *his* payment for each task performed. By the way, this shows that to associate this intermediary to the figure of a mere *broker*, as proposed by Okun (1981, p. 63) and adopted by Williamson (1985, p. 245), is totally inadequate.

According to Vandeman *et alii* (1991), in their analysis of the American case, it would be the ability of this intermediary to spread the fixed costs of labor contracting over many farmers and to relieve the farmer from these difficult problems of selection and labor supervision that would explain their prevalence in Californian seasonal labor market; these factors may also be the main cause of the prevalence of this kind of intermediaries in most other countries. In the case of Brazil, however, there is an additional reason for the prevalence of this *empretieiro*'s activity: it is the high costs of hiring and of firing a worker in Brazil, especially when dealing with short periods. Indeed, our labor legislation raises dramatically these costs of labor for the employer, especially in a situation like the one considered here, in which the worker would have to be hired and then fired for short periods, by several farmers, in succession.¹⁰ The reduction in labor costs associated to a single contracting of the worker by the *empretieiro* surely explains the important role played by this agent in Brazilian agriculture, despite the repression it suffers from the Labor Justice, to be seen in the next section.

¹⁰ This was the situation discussed in Rezende and Tafner (2006).

However, in addition to this lowering of the labor costs, there are other reasons for the presence of the *empreiteiro* in this seasonal agricultural labor market. In fact, this agent does not limit himself to the intermediation of labor (in which case he would be a mere "broker"), since, in this case, all the difficulties involved in the selection and supervision of the workers' labor activity would end up being borne by the farmer alone. This would involve much uncertainty, since the farmer would not have enough information about the worker, since the latter was chosen by the *empreiteiro* alone. It is only natural, then, that the contract between the *empreiteiro* and the farmer extends itself to the harvesting and to the transporting of the crop, for instance, so that the farmer is able to transfer to the *empreiteiro*, at a charge, the responsibility for selecting and supervising the workers. In this way, the *empreiteiro* ends up performing a much broader function than a mere intermediation of labor.

By the way, it is precisely these high costs of hiring and firing a single worker, in succession, for short periods, that, as pointed out by Lemes (2005, Chapter 4), led to the creation in Brazil of the "employers' condominiums", that became very popular in some areas of the Paraná state. In such a "condominium" the farmers form an association (the "condominium") that becomes the sole responsible for the contracting of labor, which then would be allocated to work for each farmer forming this "condominium". The whole process would be repeated in the next year, if the worker performs well. This system, therefore, would have the advantage of providing some form of stability of employment for the worker, with all the positive consequences.

This kind of legal solution requires, evidently, that the region's agricultural activities are diversified along the year, so that the worker is demanded all the year long; in addition, the worker should be allocated in such a say that all of the farmers'

¹¹ On these "employers' condominiums", see also Zylberstajn (2000 and 2003) and Dornelas *et alii* (2001). See also MTE (2000).

needs are adequately attended, specially in the right time. Not surprisingly, these "employers' condominiums" have prospered only in communities with closer social ties, as shown by Lemes (2005).

The above difficulties of coordination of the worker' activities under this "employers' condominium" are especially severe in the sugar cane areas, since sugar cane has to be harvested in very precise dates, while social integration between planters is much weaker. It is not surprising, therefore, that such "employers' condominiums" did not work out in any of these sugar cane areas. Instead, the solution was the strengthening of the empreiteiro system, coupled with a close coordination by every sugar mill, so that each plot of cane contracted to be delivered to the mill is harvested in the proper time. 12

4 – The (Mistaken) Charge of Illegality Imposed on the Agricultural *Empreiteiro* in Brazil*

In a clear conflict with the importance of the social and economic roles performed by the *empreiteiro* in Brazil, the view is predominant that, according to the existing labor legislation, the *empreiteiro*'s activity would be illegal. Such an illegality would have for basis the following "Statement no 331", of December of 1993, enacted by the Superior Labor Court:

"A contratação de trabalhadores por empresa interposta é ilegal, formando-se o vínculo diretamente com o tomador de serviços, exceto no caso de trabalho temporário (Lei n° 6.019, de 2/1/1974)". ¹³

What this "Statement" intends to say is that, when a person is contracted by a firm (the "interposed firm"), but actually taken to work in another firm – and under the

¹² Such a coordination of the empreiteiro's activities between planters is described in detail in Kreter (2007).

latter's supervision –, then this would be illegal, i.e., the "interposed firm" could not contract the worker, since he is actually working for another firm, and under the latter's supervision.

Note that this "Statement" opens an exception for "temporary labor", what could be taken as benefiting seasonal agricultural labor. However, this is not the case, apparently for two reasons: *a)* the legislation restricts the contracting of "temporary labor" to the urban world; and *b)* even in the case of temporary labor, the activities of the "interposed firm" could not be extended to "end-activities" ("atividades-fins", in Portuguese), such as cane cutting, for instance.¹⁴

Note, however, that the *empreiteiro*, object of analysis in this article, cannot be associated to this "interposed firm", since the *empreiteiro*'s function goes much beyond the mere labor intermediation. In other words, the *empreiteiro* does not limit himself just to find a worker and to hand him over to the farmer, that would be ultimately the labor user, even if not the contractor. Rather, the *empreiteiro* being analysed in this paper not only contracts the labor but also actually uses the labor contracted; i.e., he does not *pass over* labor to another firm, being, instead, the actual *user* of this worker. His contract with the farmer goes much beyond the mere intermediation of labor, since he is the actual user of labor, performing specific tasks, for which alone he is paid and from which he derives the income to *his* workers and earn his profit. ¹⁵

The mistake of appealing to this "Statement no 331" in order to argue for the legal prohibition of the activity of the *empreiteiro* in Brazilian agriculture appears clearly

¹³ In English: "The contracting of workers by interposed firm is illegal, the link having to be established directly with the service taker, except in the case of temporary labor (Law nº 6.019, of 1/1974)."

¹⁴ On these legal requirements, see Lemes (2005, p. 42).

¹⁵ As a matter of fact, *empreitada* means, in the Aurélio: "1. Obra por conta de outrem, mediante retribuição previamente ajustada; 2. Trabalho ajustado para pagamento global, e não a dias.". On the hand, "empreiteiro" means: "1. Aquele que ajusta obra de empreitada." On the other hand, in the Michaelis, "empreitada" corresponds, in English, to "contract job, task work, piece work", while "empreiteiro" corresponds to "contractor, undertaker, entrepreneur".

when one considers that this implies, for instance, that machinery rental – a very important activity in Brazilian agriculture, especially relevant for small farmers – should also be considered illegal, since the workers involved (such as the tractor driver) are usually contracted by the machinery owner, and do not work for the farmer, nor are supervised by him.

In conclusion, the "Statement no 331" cannot serve as a basis for considering illegal this contracting of labor by an intermediary such as the *empreiteiro* in Brazil. The reason is that this *empreiteiro*'s activity does not limit itself to just the contracting of labor and transferring it to the farmer. This is actually the situation in the Brazilian public sector, that contracts a firm (the "terceirizada") just for the purpose of contracting the worker and handing him over to the public agency, that actually commands the worker activity. Note, however, that even this kind of intermediation is accepted by this "Statement", if it limits itself to the so-called "atividades-meio".

This mistaken legal basis for prohibiting the *empreiteiro*'s activity in Brazilian agriculture actually is connected with a long-standing prejudice regarding the agricultural labor market in Brazil. In the particular case of the intermediary, in particular, it has prevailed the view that this intermediary, pejoratively called *gato* or *agenciador*, is a mere fake, an artifice that the *latifundio* created in order to elide the Labor Laws. However, as shown by the field research underlying this paper's analysis, the *empreiteiro*'s activity goes much beyond the mere "intermediation of labor"; it is, instead, a kind of intermediation of *activities* or *tasks*, i.e., parts or stages of the process of production. This kind of intermediation, by the way, is a phenomenon that became very frequent in the Brazilian economy after the opening-up of the economy in the decade of the 1990s, but it had always existed in the Brazilian agriculture. The difference between industry and agriculture, however, is that in the industry such an

intermediation of tasks takes place outside the firm, while in agriculture the "tasks" take place within the farm, giving the impression that the activity is actually commanded by the farmer himself. But the phenomenon, both from an economic as well as from a juridical point of view, is the same.

To argue that the *empreiteiro* is just another form of "cat", at the (hidden) service of the *latifundio*, is the same as to admit that the farmers can, in fact, contract directly the labor force that they need and assume all the responsibilities that today are assumed by the *empreiteiro*. This is simply untrue, especially in a continental country like Brazil. Thus, if the intermediary is a mere "cat", a "fake", it is a fake created not by the farmer, but by all of those that strive to punish this activity as illegal, notwithstanding all the positive social and economic roles derived from it.

Note, finally, that the restriction imposed on the *empreiteiro*'s activity affects much less the bigger farmers, such as the sugar mills, than the smaller farmers, for obvious reasons. Even large farmers, however, also uses the *empreiteiro*, as shown in the field researchs underlying this paper.

5 – Labor Legislation and its Different Impacts on the Agricultural and the non-Agricultural Sectors in Brazil: An Application of Transaction Costs Analysis

A way of synthesizing the analysis presented so far is to say that the agricultural labor policy instituted in the 1960s introduced a distortion in the agricultural labor market, with labor becoming, suddenly, very dear for the employers, although, from the point of view of the worker, the wage was kept low, or could even have fallen. This caused a great divergence (a "wedge") between the social cost of labor (the wage received by the worker) and its private cost (the cost of labor for the employer).

It is interesting to note that, in the standard analyses of the urban labor markets, it is very common to work with the concept of such a wedge, going to the point of estimating the magnitude of this difference between the cost of labor from the point of view of the employer and the income actually accruing to the worker. Since this difference is usually due to taxation on labor, this wedge is commonly called a "fiscal wedge", as can be seen in Ulyssea & Reis (2006), for instance. Reis & Ulyssea (2005), on the other hand, present a synthesis of the literature on this and other issues related to the urban labor markets in Brazil. ¹⁶

An issue closely related to the creation of this "fiscal wedge" by the labor laws is the question of the informal labor market. This informality would lead both to a reduction in the cost of labor for the employer – since the labor laws would not be obeyed – and an increase in the wage received by the worker to a level at least equal to the minimum wage. Actually, this informality represents a kind of pact between the firm and the worker, each side expecting to gain from it.

However, this literature does not consider that such an informal labor market implies a risk for the firm, in view of the fact that the worker can just wait some time receiving an income greater than he would earn in a formal labor market, and then denounce the firm to the Labor Court, being able, therefore, to earn an extra income, after denouncing the firm. Ulyssea and Reis (2006, p. 8), for instance, are explicit in limiting their analysis to "a model with two sectors (formal and informal), in which the only institutional aspect that differentiates both is the tax that is imposed on labor."

It seems implicitly admitted in such an analysis that, in this informal labor market, the "wedge" between the cost of labor for the firm and the income received by the

¹⁶ See also, in this respect, the article by Edward Amadeo entitled "A Lógica da Reforma Trabalhista", published in the newspaper Valor of August 10, 2007, p. A11. The author also presents, in a very simple and clear manner, this basic analysis of how the labor market adjusts to the impositions of the "labor laws", creating this "wedge" between the two sides of the labor market.

worker would become zero. But such a conclusion is wrong, since the underlying analysis is not taking into account the transaction costs that the firm now faces, associated, among other things, to a possible opportunist behavior on the part of the worker, denouncing the firm to the Labor Justice. Therefore, informality in the labor market cannot be defined as a situation in which, in contrast with the formal labor market, the wedge between the cost of labor to the employer is the same as the income appropriated by the worker, since the firm now has to consider the transaction costs associated to its illegal situation. ¹⁷

This basic labor market theory allows us to explain better the components of the wedge that the agricultural labor laws created, in Brazil, between the wage received by the rural worker and the cost of such a labor for the farmer. In the first place, it must be pointed out the administrative cost incurred by the farmer in order to satisfy all the requirements of the Brazilian Labor Legislation (CLT); as it was noted, the unit value of this administrative cost is higher for smaller farmers and includes, also, the loss of income associated to the farmer trips to the closest town.

In the second place, the labor legislation creates difficulties for the functioning of this market – for instance, by considering the intermediary's activity illegal and generating, therefore, great risks for the farmer. These risks include not only the moral damage implicit in the charge of practicing "slave labor", 18 but also may include absurd fines, such as the R\$ 1 million (about US\$ 450,000) imposed recently on a farmer by a

¹⁷ The importance of "transaction costs" for the feasibility of agricultural markets – of factors of production as well as of products – has been increasingly recognized in the recent literature; on this, see Allen & Lueck (2002) and Macher & Richman (2006). See also Zylberstajn (2005) and Coo and Barry (2004). For a detailed account of Oliver Williamson's analysis of the labor market, based on transaction costs theory, see Guedes (2006).

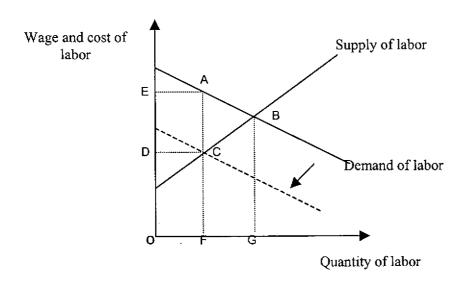
¹⁸ In an article of July of 2004, entitled "O Trabalho Escravo", Moraes informs us about the suicide committed by the farmer João Rosa, from Xambioá (TO). This farmer was a friend of the Senator João Ribeiro (PFL-TO), who gave this information, in a speech in the Federal Senate. According to the Senator, the landowner became depressed after being charged with the accusation of the crime of "slave labor" in his farm. Obviously, this is a "transaction cost" caused by the policy, and the risk run by the farmer should be included in the "wedge" being discussed here, as a transaction cost.

judge in São Félix do Araguaia, state of Mato Grosso. 19 These are risks, of course, that constitute "transaction costs", constituting a labor cost for the employer, but being far from being appropriated by the worker.

It must be emphasized that all these costs that are born by the productive sector, but that are not appropriated by the worker, end up working as if they were taxes on labor, but without generating income for the government. In order to clarify better this proposition, we present Figure 1, which extends the usual analysis of tax incidence to the analysis of the temporary agricultural labor market in Brazil.

Figure 1

Impact of the Labor Policy on the Wage and the Agricultural Labor Cost



As shown in the Figure 1, a labor tax would move to the left the demand curve of labor, in view of the fact that, after the tax, there is a distinction between the gross and the net wage, the decision with respect to the supply of labor having to do, now, with the net wage, not with the gross wage. The consequence of this taxation is a reduction in the number of worked hours from G to F, the net wage of the worker falling from GB to

¹⁹ This information was given by Agência Estado on Jan.10, 2007, in the article "Multado em R\$ 1 Million Ruralista do Mato Grosso por Trabalho Escravo". For an online access to this information, see: http://br.noticias.yahoo.com/s/10012007/25/manchetes-multado-r-1-mi-ruralista-mt-trabalho-escravo.html.

CF, while the cost of labor for the employer rises from GB to AF. The government revenue is EACD, and the loss of economic surplus, or the "deadweight loss", is the triangle ABC.

In the case of the temporary agricultural labor market in Brazil, however, several components of labor cost (as the increased transaction costs arising out of the illegality of the *empreiteiro*), imply that the demand curve for labor moves to the left, as in the Figure 1, but, contrary to what happens in the case of a labor tax, the loss of surplus corresponds to the entire area of the trapezium EABCD, that is, the deadweight loss includes, now, also the rectangle EACD.

This analysis is also relevant for a comparison of the agricultural labor market with the urban labor market. Certainly, the "wedge" AC separating, in Figure 1, the cost of labor and the wage received by the worker, is much greater in the agricultural labor market than in the urban labor market, since several of its components – such as those arising from the illegality of the intermediary – are specific to the agricultural labor market. On the other hand, both labor markets bear the labor taxes properly speaking, i.e., the employer contribution to the INSS, the deposit in the FGTS account of the employee, etc. However, while in the urban world these taxes may be appropriated by the worker, even if only in the future, ²⁰ in the case of the seasonal agricultural labor market, these charges are much less appropriable by the worker, due to the intermittence

²⁰ According to Haddad (2005), in an analysis focusing on the urban world, these labor surcharges make the effective cost of labor be much greater than the "basic wage", but represent advantages for the worker, even if appropriable only in the future (in terms of the Figure 1, the area ACDE would end up accruing to the worker, in the future.) In contrast, Pastore (2005) argues that only workers from big corporations are capable of appropriating these surcharges, since only these corporations can actually transfer these costs to the prices of their products. It is based on this argument that Pastore, by the way, explains the great informality that prevails in the urban labor markets in Brazil, what ends up causing the social security growing deficit.

of his presence in this market and uncertainty regarding the future.²¹ For this reason, these taxes, that increase tremendously the costs for the employer, may have no meaning for the agricultural worker, not even in the future. This leads the agricultural worker to perceive these "rights" in a manner totally diverse than the urban worker, becoming much more willing to given them up in exchange for a higher wage today.

It is easy to understand, therefore, why informality in this seasonal agricultural labor market is much more widespread than informality in the urban world. The reason is that, in this way, it is reduced, to a greater extent than in the urban world, the cost of labor for the employer and, at the same time, it is increased the wage received by the worker. However, to the extent that this becomes generalized, it becomes unfeasible, for the employer, to hire labor in this market, pay the ruling wage and at the same time satisfying the requirements of the labor legislation. This higher degree of informality in the temporary agricultural labor market makes it easy for the Labor and Justice inspectors to find situations of informality, in many cases exaggerating and quickly cataloguing them as a "slave labor" or as "conditions analogous to the slave", as pointed out in the previous section.

It must be admitted, however, that nothing prevents these seasonal rural workers from adopting an opportunistic behavior, denouncing the employer to the Labor Justice and therefore benefiting both from the higher income associated to labor market informality as well as from the fines imposed by the Labor Justice. By the way, this may be relevant to explain the problem of "slave labor" in Brazilian agriculture, as discussed in the next section.

²¹ A matter entitled "Migrantes Dominam Plantações do Centro-Sul", published by the newspaper Valor Econômico in 21/12/05, p.A12, informs that the typical cane cutter in São Paulo is a seasonal migrant and that manages to remain in the activity during five to eight years; this period was greater in the past (from 15 to 20 years).

It is interesting to note, however, that this higher informality in agriculture is probably restricted to the seasonal labor market. This is for the reason that the permanent labor market does not suffer from the problems of the seasonal labor market, but it has to face another problem, perhaps more serious, that of high supervision cost. This is clearly the case of the tractor driver, for instance; the hypothesis raised here is that the satisfaction of all of the workers "rights" – first and foremost, the signing of the labor card [the *carteira do trabalho*], due to its symbolism – may be seen as a way to save on supervision costs, through stimulating the worker to do his best with little supervision. The case of the milking worker (the *retireiro*), that has to work since early morning hours, preferably without supervising, also illustrates the argument.

It deserves to be pointed out, also, that the supply curve of labor in this market tends to be very unstable, moving to the right or to the left in accordance with the situation in the urban labor market. Rezende (1985), for instance, showed that the growth of the Brazilian economy from 1968 on made the supply curve of temporary labor in agriculture to move to the left, with a consequent increase in the wage of the daily worker. *En passant*, this contraction in the supply of temporary labor in the agricultural labor market, with consequent increase in the wage, contributed to the rise in agricultural mechanization that occurred throughout the 1970s.

6 – Does it Actually Exist Slave Labor in Brazilian Agriculture? Another Application of Transaction Costs Analysis

The officially considered illegality of the *empreiteiro*'s activity makes investments in this activity to be very risky. This, in its turn, cannot but raise this activity's required rate of return, what is accomplished by the provision to labor, by the *empreiteiro*, of precarious conditions of lodging, transportation, and even of feeding itself. This result would also reflect the worker's preferences, to the extent that the alternative of not

reducing these expenses would be to reduce the net income received by the worker and that he sends home every month (or takes with him when he goes back home).

The illegality of the *empreiteiro*'s activity also prevents that contracts be signed among all parties involved, what raises transaction costs and constrains the development of the labor market. In addition, since the landowner ends up being the sole responsible for all the costs imposed by an eventual intervention by the Labor inspectors, the *empreiteiro* – especially in the most distant regions of the country — does not have to worry about the fulfillment of the most elementary requirements of the labor laws. Actually, it may be assumed that there occurs a kind of "adverse selection" of these intermediaries, with the predominance of persons more akin to the use of force, for instance. After all, since their economic activities are considered illegal, they have no other alternative but to use violence, if necessary, in order to recover the investment they make in the transportation of the workers and in the advance of cash for the maintenance of the families left behind.

In particular, in these remote regions, these intermediaries face the problem of assuring themselves that the workers fulfill their commitment with them, so that, after being financed for their trip and for all other expenses in their way to the place of work, do not act in an opportunistic way, fleeing from the farm. Such a strategy by the worker would have for purpose to bring back with him the Labor agents, so that the *empreiteiro* and the farmer – but especially the latter, the only imputable by law –, could be caught in several irregularities, easily found in the face of the prevailing labor laws. The worker's main purpose in this action, however, would seem to be less to elide the payment of the debt previously contracted with the intermediary, and much more to get the "fine" of several thousand reais, usually imposed by the Labor inspector on the

landowner and in favor of the worker, on the accusation of the practice of "slave labor".22

Note that this kind of opportunistic behavior on the part of the worker is being very stimulated by the priority ascribed by the government to these inspections, whose numbers increased very fast in the last years, leading, as a consequence, to a great increase in the numbers of the workers that were "liberated". This includes the installation of several telephone numbers throughout the Northern states, in order to facilitate the accusations by the presumed "slaves". The government action has also facilitated the massive presence of the national and international press in these inspections. ²⁴

It is not unlikely that, in these conditions, the *empreiteiros* and the farmers try to restrict the workers' mobility, once they enter the farm. This control of the workers' movements would have for purpose to prevent these workers from leaving the farm and bringing back with them the Labor inspectors so that a *flagrant* occurs, i.e., that the agents are able to invade the farm and reach the places where the supposed "slaves" are

²² On this subject of "slave labor" see Barretto (2004) and Germani (2004). In addition to the fine, completely arbitrary, the landowner accused of "slave labor" has his name included in a "dirty list", that is public (it is placed in the site of the Ministry of Labor); the government has managed to make the banks not to lend to these farmers. In addition, as Barretto (2004) explains, there is a Constitutional Amendment in Congress proposing that the farmer accused of "slave labor" should have his property expropriated for the purpose of agrarian reform.

²³ In a matter entitled "Struggle for Freedom", the magazine *Desafios do Desenvolvimento* (Year 4, n° 31 (Feb.2007, p. 6), informs us that the number of these inspections rose from 19 to 85, between 1999 and 2006, while the number of workers "liberated" rose from 725 to 4,348 in the same period. On the other hand, according to an interview given by Laís Abramo (director of ILO in Brazil), to the article entitled "Trabalho Escravo sem Punição", of O Globo of 9/21/06, p. 29, a total of R\$ 7.4 million was paid to "slave labor" in 2005, while in 1999 the payment was none.

²⁴ For the coverage of the international press, see, for instance, the article "Forest Slaves" published in the Sunday Times of 9/3/06. According to this article, Brazil is not only destroying the Amazon, but it is also recreating slavery in the Western Hemisphere! According to this famous newspaper, "[The workers] had been recruited by the "cats", employees of rich farmers in the Amazon region". In the same vein, the Globo On Line of March 9, 2007 informs us that "The Guardian", the famous London newspaper, perhaps to celebrate President Bush's visit to Brazil, published an article in that same day entitled "Slaves Sustain the 'Boom' of Ethanol in Brazil". However, the national press does not stay behind; for instance, the Jornal do Brasil of April 28, 2006 uses the title "Bóia-Fria em Éxodo Rumo à Escravidão", and when we read the matter, we find that it is just an interview with a seasonal worker traveling from the Northeast toSão Paulo in order to work and be able to sustain his wife and his children! What does this have to do with "slavery", only the newspaper can tell us.

kept. This "flagrant" would allow these agents, duly accompanied by the Federal Police and many other people – including the national and the international press –, to enact the heavy fines to be borne by the landowner and in favor of the workers, first and foremost the worker that has denounced this landowner and his "cat".

It is interesting to note that this situation of "slave labor" has nothing to do with "debt peonage", a historical mechanism of limiting the workers' movements in situations of "open resources", which simply do not exist anymore in Brazil.

This problem of "slave labor" has attracted much interest not only from the Brazilian government [see, for instance, Ministério do Desenvolvimento Agrário/INCRA (2005)], but also from international organizations [see, for instance, International Labor Organization (2005)]. Not a single word has been said, however, about the underlying basic cause of the problem, i.e., the Brazilian agricultural labor legislation itself. Instead, all analyses blame the *latifundio*, and the solution is often seen in the expropriation of the *latifundio*'s land.

Note that it is also very common to impute to the *empreiteiro* and to the farmer the charge, less dramatic, of reducing the worker to a situation "analogous to the condition of slave", or "degrading". This would have to do with the precarious conditions of lodging and food that are provided to the worker, especially in the face of the high standards required by the labor laws. The problem with this "softer" accusation of slavery is to ignore that these precarious conditions also reflect a worker's decision, since, as pointed out before, increased expenses by the *empreiteiro* on working conditions and provision of food would imply a fall in the wage taken home, at the end of his journey, by the worker.

The right solution for all these problems is just one: a radical change in the Brazilian labor laws, so that formalization of contracts may make it feasible that the

markets function with least uncertainties and risks for all the parties involved, with the consequent reduction in transaction costs. As a result, there would increase the expected profitability for the *empreiteiro* activity and for the farmer, leading to higher level of employment and higher wage received by the worker.

7 - Summary and Conclusions

This paper sought to contribute to the analysis of the factors behind the predominance, in Brazilian agriculture, of a technological pattern characterized by large-scale production and high degree of mechanization.²⁵

It could have been expected that the family farm had grown at a much faster rate in Brazil, on the basis of the free market forces themselves. This would have been due to the peculiar characteristics of the agricultural labor market, which creates difficulties for the development of capitalist agriculture, as recognized by the ample international literature on the subject. The inexistence of economies of scale in agriculture would strengthen the predominance of family farm. However, as argued in this paper, this potential for family farm growth was hindered in Brazil, due to the following reasons:

a) Lack of access to credit vis-à-vis the medium and the large farmer. This lack of access to credit is usually attributed to precariousness of access to land on the part of this small farmer, but, as it was suggested in this paper, it is more likely that this lack of access to credit has been due to the action of the State itself, in its pretension to protect

²⁵ Note that land tenure policies begun in 1964, with the Land Statute, are also responsible for the poverty problem in Brazil, but, as pointed out before, could not be discussed here, for reasons of space. The same could be said with respect to the agricultural credit policy. As mentioned in the Introduction, the role of these other policies is discussed in Rezende (2006).

^{26.} For a critique of the belief in the existence of economies of scale in agriculture, see Binswanger & Elgin (1989), Abramovay (1992) and Veiga (1991, pp.175-203).

the small producer, both through constitutional norms – as in the prohibition of the mortgage of the land owned by this farmer – as well as through the action of the Judiciary in is attempt to make "social justice";

- b) Very high cost of temporary agricultural labor, especially for the small producers; and, finally,
- c) Suppression of the land rental markets, eliminating this avenue of creation of opportunities for social and economic ascension on the part of salaried workers and small farmers.

It is interesting to emphasize this hypothesis that the weak access to credit on the part of the family farmer, in Brazil, may be caused less from the precariousness of the access to the land and more from the excessive protection that the State seeks to provide to this farmer, in his relationship to the financial market. In effect, if this is true, then it follows that this farmer must not valorize the very formalization of the property title. The correct policy should be, then, to "unprotect" this small farmer, eliminating the Constitutional norm and the supposed protection by the Judiciary. Note that, here, it is total the analogy with the policy to protect the small producer against "exploitation" in the rental and sharecropping land markets.

With respect to wage labor, it was concluded that qualified labor ended up benefiting more from the public policies adopted, since the demand for this labor increased, as a function of the mechanized technique. The impact of the Brazilian labor legislation on this kind of labor force, in terms of increase in cost, is much smaller when compared with the impact on the temporary labor force. Were not for the labor market policy, there would have been much less absorption of this qualified labor, but, in compensation, there would have been much greater use of temporary labor, specially the seasonal migrant, what would have benefited the regions of origin of this labor force.

This would result in a greater spatial homogeneity in Brazil, with consequent reduction in rural poverty.

While pointing out the negative role played by the labor taxes also in agriculture, the paper gave more emphasis, however, on the "transaction costs" that these policies created in the agricultural labor market. Actually, it was proposed that these transaction costs may be causing more damage in the agricultural labor market than the "labor taxes". This would be due to the increase in the several forms of risks that this labor legislation is creating for the several agents involved in this agricultural labor market, due to the impossibility of contracts between the several agents in this market, and much less their enforcement, due to the illegality of the *empreiteiro*.

As argued in this paper, it is such a inadequate institutional setting that creates several forms of transaction costs in the Brazilian agricultural labor market, first and foremost due to the stimulus to opportunistic behaviors on the part of the all the agents involved. These transaction costs are borne, ultimately, partly by the farmer and partly by the worker. The farmer has had the option, however, to adopt the mechanized technique, but there is no alternative to the worker but to seek employment elsewhere.

The main conclusion of this paper is that the change in the present pattern of agricultural development requires a deregulation of the agricultural labor and land markets in Brazil, in addition to a greater feasibility of the access to credit on the part of the small farmers and a reduction in the subsidy to rural credit.²⁷

It is interesting to note, *en passant*, that this problem of access to credit on the part of the small farmer became serious, in part, due to the greater imperative of adoption of a labor saving technique, due to the labor market policy. Were not for this agricultural

²⁷ Note that this was also the general policy proposal by Binswanger & Elgin (1989, p.15), when they said that "the governments should abolish perverse laws that restrict the renting of land as well as the labor markets, so that people become freer to rent their lands and to make a more intense use of labor".

labor policy, the access to credit would not have become so crucial in agriculture, since this sector would not be forced to adopt technology intensive in capital and saver of labor of agriculture-specific qualification. In this way, there would have been a faster development of the family farm, together with a greater absorption of the wage labor, both: the temporary and the permanent worker.

Finally, it should be admitted that some of the main conclusions of this paper were based on the fieldwork conducted in the São Paulo sugar cane regions. It is advisable, therefore, to extend this fieldwork to other regions, both in São Paulo and elsewhere -- but especially in the Northern states, due to the allegations of the existence of "slave labor".

By the way, it should also be acknowledged that fieldwork, which used to be so important as a research tool among social scientists in Brazil, has been virtually abandoned in favor or the use of secondary data — first and foremost, PNAD data. Definitely, however, as shown by the experience of the field research that supported this paper, no progress in the analysis of the agricultural labor market can be achieved just through recourse to PNAD data. This is for the simple reason that PNAD grossly underestimates the number of the seasonal agricultural workers in Brazil, especially so in the regions where this form of employment of labor most expanded, like the São Paulo sugar cane regions. The reason for this underestimation is that these workers do not form "domiciles" in their regions of destiny, but only in the regions they left behind. Due to this basic inadequacy of PNAD data, it will be necessary, in the continuation of this project, to review critically the several studies that have been conducted on the agricultural labor market and poverty (not only rural) in Brazil. This questioning of this former research on the agricultural labor market in Brazil may lead, also, to propositions

of reform in the PNAD procedures, so that this source of data becomes more adequate for the analysis of the agricultural labor market in Brazil.

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