Journal of
Agrarian Change

Journal of Agrarian Change, Vol. 13 No. 4, October 2013, pp. 488–519.

Dynamics of Harvest Subcontracting: The Roles Played by Labour Contractors

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A historical perspective of three export agro-industries in Argentina (lemons, sweet citrus and tobacco) illustrates the range of factors that may foster subcontracting and the choice of subcontracting modalities. The case studies also illustrate that subcontracting is often a fragile strategy that leads to the eventual reabsorption of subcontracted tasks. We argue that the fragility of subcontracting the harvest rests on the inability of producers and labour contractors to negotiate a relationship that favours collaboration and problem solving. This failure is at the root of the high transaction costs of harvest subcontracting that force producers to resort to ancillary investments or sanctions, or to reabsorb some or all of the delegated tasks. A mismatch of resources and technical competence between producers and harvest labour contractors also contributes to inadequate performance of services. It is thus not surprising that harvest labour contractors are not always permanent fixtures; they may appear, disappear and reappear, particularly in fresh fruit export industries.

Keywords: 'labour contractors', 'service firms', contract negotiations, 'transaction costs', subcontracting

INTRODUCTION

The emergence of labour contractors – 'gang masters' in nineteenth-century Europe and '*enganchadores*' in Latin America – has been attributed to the spread of capitalism in agricultural production and a consequent increase in competition that forced farmers to search for a reliable source of cheap labourers.[1] In Latin America, the state often supported farmers' labour recruitment efforts through a variety of institutional arrangements, such as indenture, debt peonage, vagrancy laws and bilateral migration agreements.[2] But in some cases, the state limited

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[1] As grain production expanded in mid-nineteenth-century England, the remaining attached agricultural servants could no longer supply the required labour. Gang-masters flourished, as they could offer a cheap service by recruiting not only men but also vulnerable women and children, who were forced to accept lower wages (Hasbach 1966; Armstrong 1988; Brass 2004). In nineteenth-century Latin America, labour shortage was also a critical constraint in areas of capitalist expansion and producers resolved the problem through a variety of recruitment strategies. In Peru, coastal cotton plantations depended on independent labour contractors, who enticed highland Indians with monetary advances (*enganche*), until the late 1880s, when an adequate migrant stream of labourers was established (Favre 1977). However, Peruvian *sugar* coastal plantations depended on black slaves until their emancipation in 1845. Thereafter, sugar producers switched to imported indentured labourers from the Orient. Only when this supply was cut off in 1874 did sugar producers begin to hire labourers from regional villages as well as indentured Indians brought by labour contractors from the highlands (Klaren 1977; Albert 1984). Sugar producers in Jujuy, a north-western province of Argentina, did not initially rely on labour contractors, but on frontier-based government agents or Indian chiefs who supplied them with labourers.

[2] Sugar producers in Tucumán, another province in north-western Argentina, initially gained access to labourers through a vagrancy law that was administered by the police rather than by independent contractors. Producers

 doi: 10.1111/joac.12001

access to these benefits to loyal producers, forcing producers in rebellious regions to depend on the services of labour contractors.[3] Historians have also noted that once the mode of recruitment was established, it tended to persist until it became too expensive, ineffective or its legality was questioned (Campi 1993).

Historical studies also show that labour contractors were present in capitalist agricultural systems and that they are once again very active in major export industries.[4] Labour contractors first appeared in Tucumán's sugar industry in the 1920s (Rutledge 1987; Giarracca et al. 2000) and became familiar agents throughout Argentina in the 1990s, with the globalization of the food industry (Aparicio et al. 2004; Benencia and Quaranta 2006). However, managers of large farms, who are able to smooth the annual demand for labourers, often prefer to retain direct control over recruitment and supervision rather than delegating it to labour contractors or service firms.[5]

Economists have shunned historical and structural explanations for the emergence of labour contractors by phrasing the argument in terms of capitalist producers' need to control costs and strive for efficiency. They have argued that in underdeveloped markets for labour, regional labour shortages and/or the high cost of repetitive recruitment of harvesters triggered the emergence or re-emergence of labour contractors. Undoubtedly, with the expansion of highly productive industrial mono-crop agriculture, seasonal labour demand fluctuations have become more pronounced and the hiring costs of occasional labourers have increased. Vandeman et al. (1991) argued that contractors were more efficient as recruiters because they had built vast networks of contacts in near and faraway labour pools. Labour contractors can also reduce search costs by increasing the number of clients, moving harvesting crews from farm to farm and assuming related administrative tasks that require special expertise. Producers who depend on illegal migrant labourers also feel better protected when hiring them through labour contracting firms (Thilmany 1995; Thilmany and Martin 1995; Strochlic and Hamerschlag 2005). However, Vandeman et al. (1991) remind us that subcontractors' lower costs are often achieved by failing to pay social security taxes and by offering lower wages. A similar argument can be made for the current re-emergence of labour contractors in Europe and Latin America.[6]

Argentine scholars have stressed the role that globalization and neoliberal policies have played in the re-emergence of labour contractors. They have argued that globalization forced suppliers to compete in global markets by lowering prices, controlling wages and opposing

then managed to retain assigned labourers by extending monetary advances that could never be totally cancelled (Campi 1991). Servitude based on vagrancy did not end in this region until 1896; a few years later, debt peonage ceased to exist. For other state-sponsored mechanisms of recruitment, see the previous footnote.

[3] The coffee industry in Chiapas, southern Mexico, illustrates the role of politics in the mode used to recruit labourers. In one district of Chiapas, Palenque, the state government supplied coffee farmers with indebted labourers. However, in neighbouring Sosonuco, conflict between state authorities and producers forced the latter to rely on labour contractors, for in the absence of coercive power (their own or state-derived), this elite had trouble attracting, retaining and controlling workers (Washbrook 2007).

[4] California is a prime example of long-standing presence of labour contractors who have supplied farmers with labourers, on and off, since 1870 – initially with Chinese migrants and subsequently with migrants from Mexico and Central America (Fisher 1953; Sosnick 1978; Daniel 1982; Griffith and Kissam 1995; McClelland 1997; Mize 2006). Presently, one third of seasonal labourers are brought in by contractors or service firms, including well-managed small organic farms (Strochlic and Hamerschlag 2005).

[5] Brazilian export grape farms in the São Francisco Valley offer permanent contracts to at least 50–60 per cent of their labourers. These producers are not concerned about flexibility, but about retaining experienced and qualified labourers (Selwyn 2009). They do not use labour contractors to hire or manage seasonal labourers. See also the section on tobacco in this paper.

[6] With the opening up of frontiers in the EU, there has been a significant movement of unskilled labourers who cannot communicate with growers in the host country and do not yet have the documentation required to seek employment. These migrants seek labour contractors who, for a fee, will connect them with an employer and negotiate contractual terms. Contractors and migrants may often share a similar background, but the contractors are also mindful of their own self-interests (Hartman 2008).

costly labour-protective legislation that had been introduced by previous populist governments. These scholars have also argued that the more recent transformation of international trade, from a system of wholesale auction markets to a network of commodity chains controlled by supermarkets in importing countries, has required producers to become *more efficient* and compliant with 'just-in-time' deliveries by adopting *flexible labour management rules* (Giarracca et al. 2000; Aparicio et al. 2004; Neiman and Quaranta 2004). The restructuring of the international fresh food trade coincided in Argentina with an increasing popularity of neoliberal policies (e.g. deregulation, lifting of trade barriers and the dollarization of the economy) that were introduced to overcome a growing trade deficit, money printing sprees and out-of-control inflation. While these policies facilitated exports and the modernization of agro-industries, they had a negative effect on labour costs; wages and dismissal costs had to be paid with an overvalued currency. In some agro-industries, the concurrence of export stimulus with constraining policies prompted producers to protest and to re-evaluate managerial strategies.

Argentine scholars have noted that producers were choosing strategies that reduced costs while increasing efficiency and flexibility. One of the most familiar options considered was to delegate specific tasks to an agent: a labour contractor, a service firm or a 'pseudo labour co-operative'. A second option, suitable for large farmers who also pack and/or process agricultural produce, was to delegate under contract the production of a share of the produce they handle to small farmers. This system, known as 'contract farming', was familiar to some fruit producers in Argentina and common in annual export industries elsewhere.[7] A third option for producers of annual crops was to contractually delegate the management of a stage in the production process to a sharecropper. A fourth option, suitable only for small producers, was to delegate harvest tasks to the purchaser of the produce (see Table 1). The first option predominated in the first two case studies of citrus industries. The second option was used to a limited extent by some sweet citrus producers (the second case study). Sharecropping was favoured by tobacco producers in the third case study.

Although subcontracting has become a popular strategy, it is not universally favoured.[8] Not all citrus producers subcontracted harvesting tasks and the majority of tobacco producers who worked with sharecroppers reverted to direct management in later years. Hypotheses that purport to explain the surge of subcontracting and the proliferation of labour contractors and service firms must also account for the exception by examining not only structural market factors and government policies but also the action of relevant agents, who ultimately are the ones to determine whether or not to reorganize the management of the industry, and who choose the path to follow. In the first two citrus case studies, farmers and managers of large firms were the ones who decided when to reorganize and to evaluate options. They aimed at reducing costs, improving efficiency and gaining managerial flexibility. In contrast, large tobacco producers initially wanted to delegate management responsibility.

Economists assume that the selection of an option is based on a careful evaluation of the direct *transaction costs* (e.g. wages, taxes, fringe benefits) as well as the *indirect hidden transaction costs*

[7] Processing and exporting companies that specialize in labour-intensive crops often subcontract the production phase to small farmers. The contracts specify the inputs required and the agronomic practices that farmers must follow. Processors and exporters may subsidize inputs and extend credit, while farmers contribute with land and labour (Raynolds 2000). Contract agriculture is not a new development, but it has become very common in labour-intensive annual crops and in some non-traditional perennial export crops such as bananas in the eastern Caribbean and grapes in Chile (Korovkin 1992; Grossman 1998). Key and Runsten (1999) examine some of the advantages and *transaction costs* of this field production strategy.

[8] In California, 35 per cent of farmers, mostly large producers, preferred not to hire contractors in 1988 and 1989 in a major vegetable-producing area (Vaupel 1992). In Uruguay, only 5 per cent of citrus harvesters are hired by contractors (Piñeiro 2008). Coffee farmers in one of the major coffee-producing areas of Colombia avoided the use of contractors, even though half of the harvest labour force came from other municipalities (Ortiz 1999).

Table 1. Alternative management modes and potential transaction costs[a]

Producers	*Subcontracted task*	*Agents*	*Transaction costs*[b]
Large firms (high share of exports)	Harvest	Labour co-operatives	Potentially high
		Service firms	Potentially adequate
Large firms (low share of exports)	Harvest	Labour co-operatives	Potentially adequate
		Service firms	Potentially low
Large firms (high share of exports)	Production	Small farmers under contract	Potentially adequate
		Sharecroppers	Potentially adequate
Small-to-medium producers	Harvest	Family and labourers	Low
		Sell crop on tree	Low
		Hire small contractor	Potentially high

[a] For a description of modes of subcontracting, see the lemon case study and the tobacco case study.
[b] The ranking of transaction costs is subjective. It was based on responses to questions about the advantages and disadvantages of each option.

entailed in the enactment of each of the options. Undoubtedly, farmers and managers have a clear idea of the direct *transaction costs* of the harvesting mode that they adopt, and may learn about the costs of other modes from agricultural extension agencies. But it is difficult for producers to predict and quantify *indirect transaction costs*, given the dearth of available information and the impact of social factors that may influence the attractiveness and costs of some contractual options (Dolan 2009; Garsten and Hernes 2009). They must have used some other evaluative procedure that better captured the conditions and limitations that they faced (Tversky and Kahneman 2000; Ortiz 2012). Regrettably, we were not able to analyse this critical stage of the process, as these decisions were made about a decade before the producers and managers were interviewed. At least, we were able to confirm, through published statements and responses to questions, that cost controls and increased flexibility of labour management were the two central aims of the subcontracting strategy. It also became clear to us that, as citrus producers had discovered, to subcontract a key task to yet untested agents (the heads of pseudo labour co-operatives) was a gamble with unexpected transaction costs. Their solution was to contain these added costs with ancillary strategies.

The most ubiquitous ancillary option available to the producers in our case studies was to evade the registration of workers, which is illegal but allows producers and labour contractors to cut labour costs. Large producers and managers of big firms favoured ancillary strategies that not only cut costs but also increased efficiency. Although no machines have been designed to harvest citrus and efforts to mechanize the tobacco harvest have been unsatisfactory, producers have been able to introduce equipment that facilitates the harvest or the initial processing of the produce.[9] As the lemon, sweet citrus and tobacco case studies illustrate, most producers adopted more than one ancillary strategy, probably because they were unable to select 'the best option' and because of the cost of reversing inappropriate options.

[9] In *Manufacturing Green Gold*, Friedland et al. (1981) demonstrate the connection between harvest mechanization and labour supply conditions as the *Bracero Program* was coming to an end. But the drive to mechanize was stronger amongst tomato growers who faced not only uncertain labour supply conditions but also greater competition, higher production costs and a greater challenge from the unions. In Entre Ríos (Argentina), some blueberry growers who produce for export began to mechanize harvesting and pruning tasks in order to reduce costs and balance decreasing marginal profits.

Exogenous conditions can rapidly change in an agricultural export market, altering *transaction costs* as well as the effectiveness of ancillary strategies. These changes have also challenged the producer–labour contractor relation, causing related *transaction costs* to increase. Following Young's suggestion (2005, 138), we examined potentially conflictive situations and asked each party to explain, or perhaps justify, what measures were taken and their reason for pursuing them. Although Ortiz and Aparicio took farmers' and managers' explanations for granted, they tried to confirm their stories by eliciting anecdotal accounts from labour contractors about their relation with their clients.

It has been suggested that to protect themselves, producers and service providers should close a service-provisioning agreement with a detailed written contract (Wolf et al. 2001). But if the contract is to be a useful litigation tool, the document must list the subcontracted tasks, how they must be carried out, and the rule used to set the price per unit of produce harvested, incorporating the measurable characteristics that affect its market value. Such 'complete' contracts, however, are difficult to formulate. Furthermore, as several legal scholars have pointed out, written 'complete' contracts introduce management rigidities and for that reason they are often avoided. They are also often too costly to implement (Hart and Holstrom 1987; Bigsten et al., 2000). Not surprisingly, contracts are seldom very detailed or written, and although 'incomplete contracts' do not protect producers from malfeasance, they may facilitate the negotiation of appropriate management changes.[10]

It has been recognized that producers can ensure contract compliance by reinforcing mutual 'calculative trust' with their labour contractors, but only as long as the producer is the better endowed and more powerful agent (James 2002).[11] One such strategy consists of extending rehiring promises to contractors, contingent on the success of services previously provided. In this way, labour contractors resolve the uncertainty of having to search for new clients annually and producers can plan ahead. By retaining responsible contractors, producers allow for the enhancement of 'personal trust' through repeated transactional exchanges. However, Granovetter and Harris offer the cautionary warning that repeated exchanges, while informative, can also exacerbate power hierarchies that weaken trust (Granovetter 1985; Harris 2003). Producers also aim to reduce opportunistic behaviour by selecting aspiring contractors who are embedded in their social matrix. This is a viable option, but only when both agents belong to a community characterized by intensive social interaction and minimal competiveness; hence, it is not an option when the contractor's task is to mobilize distant labour pools. The ability of contractors and their partners to build trust also depends on whether situational conditions facilitate the flow of information about how each partner will respond to bargaining offers. Ostrom (2010) adds other conditions that may encourage efforts to reinforce trust: when awareness that the participant's corresponding agent can exit the contractual relation; and when awareness that co-operation can be financially more rewarding than unreasonable demands. Ultimately, producers can promote loyalty through patronage by offering other benefits, such as financial support or training (Williamson 1993; Platteau 1994; James 2002; Peppelenbos 2005). If co-operation and loyalty can be achieved without compromising the fee received by contractors or service firms, then

[10] Thilmany (1995) makes reference to a 1992 survey of Californian labour contractors, which indicates that 98 per cent of labour contractors had only a verbal agreement with their farmer clients. Yet by 1994, the percentage of written contracts had increased, perhaps because supervisory services were not at issue. Payroll responsibilities and documentation regarding hired labourers became the central issue of contracts and the most important task assumed by subcontractors.

[11] James (2002) defines 'calculative trust' as the expectation that the other agent in the exchange recognizes their mutual interdependence, values their transaction experience and is thus unlikely to exploit the vulnerability of his partner in the exchange.

labourers may also profit. How subcontracting strategies have affected the income of labourers and impacted on modes of control has been documented in three previous publications (Ortiz and Aparicio 2006a,b, 2007).

If embedding the contractual relation between producers and contractors in existing or created social relations serves to reduce opportunistic behaviour, then the social and class characteristics of the pool of aspiring labour contractors must play a significant role in controlling hidden *transaction costs*. To this aim, local accountants, who share class status with large producers and firm managers, are likely to be preferred candidates. However, class differences are not insurmountable in the case studies presented. Social networks can bridge an income and heritage gap when agents share experiences and concerns that can serve as a basis for trust. When the tasks to be delegated are circumscribed and do not require great responsibility or managerial experience, or financial and technical assets, the pool of labour contractors is likely to include supervisors or crew leaders, local truck owners or transporters, or even desperate job seekers, none of whom are likely to be part of large growers' social community. Some of these aspiring entrepreneurs may perhaps identify with the fate of the labourers they hire instead of the growers that they serve. But a large, mixed pool of aspiring contractors may encourage lower bids, and lead to cost cutting and opportunistic behaviour that may impinge on loyalty to growers and affect the welfare of labourers.[12]

This study was informed by Latin American scholars' assertion that the surge in subcontracting coincided with neoliberal government policies and the growth in global trade. It was also informed by historians' caveat that subcontracting is not an inevitable development, nor irreversible – as noted by Selwyn's (2009, 780) warning in his study of a fruit export industry in Brazil that "given the conjunctural nature of labour systems . . ., it would be wise to expect changes in the future, as they are a product of specific combinations and interactions of relatively fluid local and global processes". In each of the case studies, we identify the factors that triggered subcontracting and the processes determining adopted modes. Our central point is that these systems have evolved along different trajectories, not just in response to local and global processes but also due to internal frictions and *transaction costs* that challenged the adequacy of the strategy, leading producers to reabsorb the outsourced tasks or shift to another subcontracting modality. An analysis of contractual negotiations and of the producer–contractor relations will serve to highlight systemic frictions and help discern how choices are made. Researchers will then be able to evaluate whether adopted practices are likely to reduce costs and/or inefficiencies.

The three case studies represent only a very small sample of industries that have resorted to subcontracting either production or harvesting tasks. We have excluded cases in which the subcontractor relies mostly on machinery for the harvest. We have also excluded cases in which subcontractors are expected to import vulnerable labourers from other regions.[13] Thus our findings are restricted to labour-intensive export industries that must produce high-quality

[12] The market for farm labour contractors in California is not tightly regulated or carefully monitored. It attracts many candidates and competition is very keen, resulting in low service commissions. Labour contractors make up for low income by paying labourers very low wages, by avoiding paying social security contributions or by charging seasonal labourers high fees for housing and transport (Williams 2000).

[13] Relations between producers and labour contractors who are major labour suppliers of cheap labourers are quite different from the relations discussed here (Sánchez Saldaña 2001). Although none of the industries here discussed depend on inflow of migrants, many local lemon (Bendini and Radonich 1999) and sweet citrus labourers travel to other harvests (Tadeo et al. 2006). Some of these migrants were taken by bus transporter-cum-contractors, while others went on their own. During the early 1990s, the government assumed the cost of transporting labourers. Eventually, with subsidies from the state, the union organized transport for a limited number of committed union members. We encountered very few lemon harvesters who went elsewhere to be able to determine the impact of subcontracting on seasonal migrations.

produce. Nevertheless, our approach and many of our findings are of relevance for an understanding of the dynamics of subcontracting of tasks, in particular the responsibility of hiring seasonal labourers.

THE CASE STUDIES

Our argument about the role of exogenous factors, systemic frictions and transaction costs on the transformation of the harvest subcontracting systems is based on field research by Ortiz and Aparicio on the lemon agro-industry. The field research on sweet citrus and tobacco was carried out by different teams, each led by one of the co-authors. These complementary case studies were selected because they highlight a range of alternative strategies, of degree of absorption of delegated tasks and impact of specific government policies, market conditions and commodity characteristics on harvest subcontracting. Furthermore, the sweet citrus and tobacco industries were located in provinces also known for low wages and considerable poverty. The average urban wage in the three provinces was 32 per cent lower than the national average wage and the rate of unemployment in 2001 had reached 18 per cent. Not surprisingly, the proportion of urban dwellers who lived below the poverty line was 27 per cent higher than the national average (estimates based on data from National Institute of Census and Statistics, INDEC). None of the industries depended on a large inflow of seasonal migrant workers, although they are labour-intensive export industries.

The lemon industry is located in the province of Tucumán, in north-western Argentina. The tobacco producers are located in the nearby province of Jujuy. Both of these provinces are far from major urban centres and the metropolis of Buenos Aires. The sweet citrus industry is located in Entre Ríos, an agricultural province closer to Buenos Aires as well as other major industrial urban centres, which facilitated producers' access and dependence on a large national market. There are two other significant differences between the industries. Tobacco is an annual crop that does not rapidly deteriorate on transport, while lemons and sweet citrus are very vulnerable to bruising, a serious concern when producing for export to Europe. Tobacco farmers diversify production, while lemon producers specialize in one major crop.

Each study covered the industry during the recent years of global trade expansion and the economic transitional decade of 1991–2002, a period characterized by the opening up of the economy to imports, encouragement of exports and the dollarization of transactions. These policies were accompanied by privatization of state industries, retrenchment of the state from market interference, except in the case of tobacco, and were inspired by a neoliberal ideology that challenged inalienable rights to social services and safety nets. Attempts to dismantle existing protective labour legislation, however, met with strong union and *Justicialista* party opposition, diluting more ambitious efforts. Nevertheless, the government was able to introduce new contractual options that delayed access to social benefits for new hirings and reduced lay-off payments, but it was unable to weaken the bargaining power of the unions (Baer et al. 2002).

Yet, even after the neoliberal reforms, Argentine seasonal rural labourers in the fruit industries have considerable protection. Labourers have the right to be represented by their union in their regional, industry-wide, wage and contract negotiations. Labourers become union members automatically once they are hired. Since 1988, seasonal workers in the fruit industry have been included under *Ley de contrato de trabajo* (labour contract law); that is, Law 20.744 for field labourers and Law 23.898 for packing plant labourers. The law categorizes these seasonal labourers as 'discontinuous permanent labourers' and as such they must be recalled every harvesting season; returning labourers accrue seniority. Subsequent versions of the law have included a number of benefits often associated with permanent employment: double pay on weekends and holidays, paid vacations, health coverage and sick pay, insurance against work related accidents, family allowances, retirement benefits, complementary annual payment and lay-off compensation. Other benefits may be granted during the contract negotiations between the labour union and representatives of the industry. However, the extent and generosity of these benefits depend on the union's commitment and their links to the governing elite and to the party in power (Alfaro 2001). Tobacco labourers have been covered instead by Law 22.248 (National Agrarian Labour System) since 1980. This law applies to all labourers in non-harvesting tasks and to seasonal labourers in non-fruit industries (Aparicio et al. 1987; Alfaro 1999). In part, because of its vagueness, the above law offers less protection to seasonal agricultural labourers. Non-fruit seasonal labourers have no health coverage, vacation pay, right of recall, seniority benefits and advanced dismissal notice and dismissal compensation.

In 1999, Law 25.191 sanctioned that all labourers should receive a document stating name of employer, date of employment and job; the documents began to be issued after 2002. The intention of the document was to record workers' employment history, making it easier to confirm labourers' registration and whether social security taxes had been paid on their behalf. It has allowed for the creation of a registry of rural workers and employers (RENATRE). The law also includes a clause about a 1.5 per cent payroll deduction to finance unemployment, but it has not been fully put in place and the funding is presently insufficient. In regions where seasonal crops predominate, the provincial and national governments have put in place additional programmes to help unemployed harvesters to survive through the low season. But the annual funding is small and uncertain, covering only a fraction of the number of unemployed harvesters. It is also unclear whether RENATRE's recorded information will be used to effectively ensure registration of labourers and payment of payroll taxes, since the monitoring depends on the resources of the provincial government and the efficiency and integrity of the provincial bureaucracy. It is not surprising that, in practice, the rights and earnings of workers and the cost of hiring and retaining labourers have varied from region to region, according to producers' interests (Amengual 2011).

Our use of the term 'labour contractor' in the case study presentations refers only to *independent* agents who, at a minimum, assume responsibility for hiring labourers, but may also involve the supervision of harvesting crews, compiling payroll tasks and carrying out related administrative tasks. We exclude agents whose services are centred on technical tasks that require machinery and few operators; for example, individuals and firms that specialize in pruning, fumigation and mechanized harvesting. In Argentina, labour contractors and service firms are *de jure* employers, but the producers who hired them are co-responsible for their acts. In this paper, we do not address the relationship between labour contractors and harvesters, as it has been the subject of three earlier publications (Ortiz and Aparicio 2006a,b, 2007).

THE GROWTH AND TRANSFORMATION OF THE LEMON INDUSTRY IN TUCUMÁN[14]

I. The Initial Period

Lemon orchards were planted by small farmers during the 1950s and became more numerous when a large producer built an industrial plant in 1964. By 1969, there were 1,002 small

[14] This section is based on field research by Sutti Ortiz in 2000 and 2001, which was informed by Aparicio's interviews with farmers, managers, contractors, packers and a survey of labourers and their families. Ortiz's main

Table 2. Lemon production in tons and hectares

Year	*Total*	
	Tons	*Hectares*
1960	n.i.	1,731
1970	126,300	8,176
1975	257,900	10,499
1980	298,790	13,386
1988	171,435	16,618
1995	602,010	23,390
1998	935,832	30,200
2001	1,047,210	33,000
2005	1,468,294	33,922

Sources: Data on hectares and production were derived from Batista 2002, Ortiz and Aparicio 2007, the 2005 citrus census of Tucumán and from information from the ATC.

orchards covering 6,837 hectares (Batista 2002, 133) and five processing plants (see Table 2), one of them a co-operative. The four processing plants were connected to the four largest producing firms, which also had their own packing plant and handled the commercialization of oil, juice, dehydrated peel and fresh fruit.

During this initial stage of industrialized expansion, most of the fruit was hand-picked from trees and sold to industry or in regional markets. Labourers idealize this period, describing harvesting as a rewarding job, demanding minimal skills and regular work during long seasons. Yet, it was an expansion that grew out of the collapse of the Tucumán sugar industry, which forced the closure of a number of processing plants, creating massive unemployment, depressing wages and exacerbating social unrest.

II. Expansion of the Industry

During the 1970s, producers were ready to explore the possibility of conditioning fresh fruit export to Europe. Appropriate new varieties had to be planted; harvesters had to be trained to select and carefully harvest the fruit. Both tasks increased the demand for seasonal labourers. Exporting to Europe also required coordination and leadership. Producers and processor came together, founding the Association of Citrus Producers of Tucumán (ATC). By 1980, 4 per cent of the harvested fruit was exported and 67 per cent was industrialized, the rest being sold in the national market.

Contrary to what may be expected, these developments emerged during a difficult period. During the 1970s, guerrillas encamped in rural areas and students and labour groups organized street protests. In 1973, the military dictatorship that had been in control of

focus was on service firms, independent contractors, crew leaders and labourers. Unstructured interviews were recorded and analysed for patterns and conflictive issues. A preliminary summary of findings was circulated amongst interviewees; their comments were integrated in the final analysis. Her research was funded by the Wenner Gren Foundation for Anthropological Research. Thanks to Aparicio's return visits to Tucumán and information from newspapers and websites, we were able to update our findings.

the national government appointed a general as the governor of Tucumán, who proceeded to target not only guerrillas, but also union leaders, politicians, academics and students. It was a tense environment, with unco-operative and underpaid labourers, who were protected by a weakened labour union. Nevertheless, in 1974 the citrus labourers went on strike over contract negotiations, confronting the largest vertically integrated citrus firm by occupying their processing plants. They were dislodged, but only after violent confrontations. Although the labourers did not attain their demands, the strike sent a strong message about their potential power.

In Tucumán, the transition to democracy after the collapse of the dictatorship in 1983 was also a tortuous process. The national economy faltered, burdened by limited credit and out-of-control inflation. Nevertheless, the expansion of orchards continued, though at a lower rate. However, productivity and fruit quality decreased, as producers were too short of cash to purchase fertilizers and fungicides, and factory prices were also low. Batista (2002) reported that because of costs, producers did not always harvest all the available fruit.

III. Subcontracting the Harvest

Argentina entered a period of financial stability and growth in 1991, when the peso was pegged to the dollar. At the same time, import restrictions were lifted, the tax on diesel fuel was reduced, and exporting farmers were compensated for value added tax payments incurred in the purchase of imported agricultural inputs. In response to these events, medium farmers expanded their holdings, marginalizing small producers. By 1995, only 37 per cent of producers had orchards with less than 10 hectares, while the percentage of producers with over 50 hectares began to increase. The driving force of the expansion during this period was in the hands of the four major vertically integrated firms that in 1995 controlled 20 per cent of the land planted with lemon trees; by 1998, they controlled 45 per cent of the land and by 2001, 55 per cent (Batista 2002). One of these firms needed about 2,181 harvesters in 1994 (Batista 2002, 169–71); another needed 1,000 harvesters in 1998. The largest of the firms hired nearly 4,000 seasonal harvesters in 1998.

The expansion increased the demand for field labourers and eventually for more harvesters. According to our estimates, the 1995 harvest must have required about 10,000–12,000 labourers; twice the number required in 1988.[15] The supply of labourers was not problematic, given high unemployment and access to local urban centres. Nevertheless, transporting and supervising over 1,000 labourers was an expensive and logistically complex proposition, since the orchards of the large firms were scattered and the large firms also had to harvest the fruit of independent suppliers. The real concern for producers was the cost of a large contingent of permanent labourers, at a time when they were trying to compete in the European market with an overvalued currency. While it might seem obvious that labour costs played a significant role in the decision to subcontract, what harvest managers and labour contractors stressed when we interviewed them 8 years later was the inflexibility of the contracts and litigations for compensation over work-related injuries. The harvest manager of one of the large firms categorically stated that subcontracting would continue until the government liberalized the clauses of

[15] The slight disparity in figures presented in this paper and other publications depends on how the sources define time periods; some sources use the annual production schedule, while other sources use calendar markers. No historical information is available about the size of the harvest labour force. Our calculations are only approximations based on the weight of the harvested fruit and estimates of labour productivity given by agronomists and harvest managers with whom we consulted. However, the estimates can vary with farm conditions, climatic variations and harvesting systems.

the *Ley del Contrato de Trabajo* (Labour Contract Law), whereby employers are obliged to recall seasonal labourers or to compensate them according to wages earned and number of years worked. The Citrus Association of Tucumán (ATC) supported their members who were requesting the repeal of the law, arguing that many of the clauses were too costly and inappropriate for the conditions encountered in the agricultural sector (ATC 1996, 1997). Despite the lobbying and the neoliberal stance of Carlos Menem's government (1989–99), the producers obtained only minor cost-cutting gains: the trial period was extended to 6 months with no recall obligation, applicable only to the first season after labourers were hired. Payroll taxes and severance pay were also reduced.[16] After 1998, employers were required to purchase insurance against work-related accidents, which protected them from compensatory litigation (Aparicio et al. 1987; ATC 1996; Bour 1997). Eventually, taxes increased again, but by then the producers were benefiting from a simplification of the costly, tortuous and time-consuming procedures required for the registration of labourers and payment of family subsidies. But none of these measures addressed producers' demands for greater flexibility in the hiring of seasonal labourers.

After more than a decade of consistent expansion of orchards by the large producers, these firms were not in a position to revert to 'contract farming'. The only other options considered by producers that would abruptly cut labour costs and provide the sought-after flexibility were not registering their labourers and subcontracting. Subcontracting seemed safer to large producers and labour contractors were not unknown in Tucumán. They were familiar faces in the sugar industry and were also used by some fruit buyers during the 1970s, and by a now-defunct lemon juice processor in 1989.[17] By 1990, big firms and many large producers encouraged trusted supervisors to become either small contractors or leaders of labour co-operatives. Those who registered as a labour co-operative brought their own crews and assumed the right to represent them. As members of a co-operative, each labourer had to buy a share amounting to US$2 a month and the tools required in the performance of their job but, unlike members of true co-operatives, the labourers were not recipients of a share of the profits. The members of the labour co-operatives were in reality 'self-employed' labourers, who did not have retirement benefits or health coverage, unless they were willing to pay a social security contribution that amounted about US$100 a month (Aguilera 2001). Labourers in these 'pseudo co-operatives' who wanted health coverage had to contribute to a mutual fund that purchased private insurance. In Tucumán, the organizers of the 'pseudo labour co-operatives' were often the heads of a 'benefit society' that provided medical and burial services for a monthly membership fee. Only labourers who lived in a town with a municipal hospital could avoid having to join a benefit society. Self-employed labourers also had no union protection. The 'pseudo labour co-operatives' were a clever ruse, commonly used throughout the country in innumerable industries. But in Tucumán, the citrus 'pseudo labour co-operatives' had trouble attracting members. 'Pseudo co-operatives' and their clients also had to contend with frequent litigation for compensation from injured workers. The court cases attracted scrutiny, raising questions about the legality of these organizations. In 1994, the court ruled that 'pseudo labour co-operatives' were not legitimate organizations and forbade them to provide labourers to third parties (Decree 2015; see also Law 24.013, article 68).

[16] The producers' share of payroll taxes in 1995 was 33 per cent and the labourers' contribution 17 per cent. In 1998, taxes were reduced to 20 and 15.8 per cent, respectively. In 2010, payroll taxes were increased to 27 per cent to be paid by employers and 17 per cent to be paid by the labourers.

[17] A 1978 survey indicated that 24 per cent of the lemon producers, most of whom owned up to 50 hectares, sold their fruit on the trees to middlemen, owners of industrial plants or packers. The buyer sent contractors with crews to harvest and transport the purchased fruit (Lorente 1984).

It was not possible to reconstruct the early stages of subcontracting, as harvest managers were not willing to revisit that period. We only know that one large firm retained about 180 resident permanent labourers as harvesters until their retirement, but relied on a 'pseudo co-operative' for new hires. Subsequently, they urged their own valued supervisors to register as independent service firms. Another firm engaged in a more drastic transition: they removed all permanent employees who resided on the farm, fired their supervisors and brought them back as labour contractors. Independent agents who organized their own firms or co-operatives also offered their services to large and small producers and packers. 'Pseudo co-operatives' dwindled in Tucumán after 1994, when their legality was questioned. By 1998, there were about eight 'pseudo co-operatives' serving packing plants and many more that handled the harvest. A few years later, Aguilera (2001) was able to trace only two 'pseudo co-operatives'; a few months later, we were able to trace only one.

Labour contractors and service firms that were left with the responsibility of paying social security taxes resolved to cut costs by adopting a common ancillary strategy: the failure to record harvesters' full pay or registering only 30–50 per cent of the hired labourers, with or without the knowledge of their clients, who also benefited from the reduced costs. We were told that in order to reduce the costs of seniority benefits, some contractors created two firms, regularly shifting the registration of those harvesters they were not sure they wanted to keep. This seemed likely, but we were unable to confirm the information. Corrupt and powerless government agencies avoided searches and seldom fined labour contractors, service firms or producers for failure to register labourers.

Another concern, alluded to by some managers of large firms, was the resurgence of union power with the return of democracy, a concern that became a reality. During contract negotiations in 1994, it became clear to the Argentine Union of Rural Workers and Stevedores (UATRE) that the union's demands – a 30 per cent raise, the registration of all hired labourers and the termination of the remaining labour 'pseudo co-operatives' – were not going to be met. The union leaders called an industry-wide strike, targeting workers in the packing and industrial plants and eventually also harvesters. UATRE organized street protests and blocked routes used to transport the harvest. As the conflict escalated, two of the large firms sent termination-of-employment telegrams. The confrontation became threatening and was settled only after the governor interceded (*La Gaceta* 1994a,b; Alfaro 2000). The parties returned to the negotiating table and although the union was not able to gain significant concessions, the violence of the strike was a wake-up call for industrialists. In the interviews, some of the labour contractors, without mentioning the strike, indicated that their presence protected producers from industrial action.

Strikes, litigation over work accidents and inflexibility of contract rules signalled the choice of major tasks to be subcontracted by the large producers and firms: hiring, registering labourers, payroll and accounting tasks. Producers with about 100–200 hectares were also concerned about the hassle of having to recruit and transport a large number of labourers. Subcontracting during the peak harvest period solved the problem. Service firms were not expected to search for cheaper sources of labourers, as a large pool of unemployed workers was available. Furthermore, the task of labour recruitment had been delegated to the crew leaders that the service firms hired. If the crew leader was not able to bring and retain the requested number of harvesters, he was fired and the crew was likely to collapse in disarray. Producers and firms also subcontracted the transport of labourers to simplify logistics and reduce costs. To varying degrees, producing firms also subcontracted the supervision of harvesters, but they retained control over when and where to harvest. Producing firms also controlled the amount of fruit to be harvested, the transport of fruit, the harvesting mode and the piece-rate paid to harvesters. The firms also provided some of the equipment used in the harvest and sent their own supervisors to check on performance (Ortiz and Aparicio 2006a). Partial subcontracting forced a collaborative engagement and compelled labour contractors to mediate the conflict of interest between the state and the capitalist producers by concealing and reformulating contractual obligations. Which manoeuvre the agent used depended on the political power of the principal, and on the disjuncture between the self-interest of the principal and the political agenda of the state.

IV. The Impact of High Quality Standards

By 2001, lemon orchards covered 33,000 hectares, which are presently producing more than 1 million tons of fruit, 22–29 per cent of which is exported, mostly to Europe (Tables 2 and 3). But after 2000, to gain access to profitable niches in the European Union (EU), the fruit had to meet increasingly stringent public and private health and quality standards (Aparicio et al., 2008). These standards and rules restricted the use of chemicals and outlined costly hygiene practices in the orchards and packing plants. After 2005, all fruit exported to Europe had to be accompanied by information that allowed the traceability of the fruit from the orchard to the European supermarket. Exporting firms had to invest in new equipment in packing plants and orchards, redesigned orchard layouts and reorganized harvesting procedures (Ortiz and Aparicio 2007). Traceability required computerized information systems from service firms and individual contractors, with information about the crew location, crew membership and performance. This information has allowed exporting firms to evaluate service-firm performance and sanction those with undisciplined workers or crews with a high turnover rate. However, some

Table 3. Production and destination of lemons and sweet citrus in Tucumán and Entre Ríos

Year and fruit	*Production (tons)*	*Destination of harvested fruit (%)*		
		Exported (%)	*National market (%)*	*Industry (%)*
Lemons				
1980	298,700	4	29	67
1981	n.i.	6.5	39	54.5
1997	793,988	23	8	69
2001	1,047,210	22	5	73
2004	1,270.000	29	1	70
2006	1,316,300	26	5	69
Sweet citrus				
1981	220,700	18	64	18
1997	641,000	15	64	21
2001	727,072	13	62	25
2004	575,945	29	61	18
2006	708,915	22	62	16

Sources: For data on lemons, 1980–2004, see Ortiz and Aparicio (2007); data for 2006 from ATC (www.atc.com accessed 22 October 2012); data on sweet citrus from Dirección de Informática, Estadística y Censos. Subsecretaría de Planeamiento, Paraná, Entre Ríos; Federcitrus, año 1991 (based on information from the Subsecretaría de Agricultura, Ganadería y Pesca); Informe Citrícola, INTA (Institute of Agricultural Technology), Concordia.

firms have used the information to explore more effective harvest management practices. Europe also stymied the entry of cheap produce with the introduction of a flexible tariff system that pegged the tariff to the price difference between the average of the EU import price and the price of the imported fruit; the lower the price, the higher the tariff.

As the European market tightened, the producers and packers aimed at controlling the harvesting and packing performance in order to compete with high-quality fruit: 'Above all we have to export quality in an orderly way to insure no oversupply and high prices' has become a refrain amongst members of the Association of Citrus Producers of Tucumán (ATC). If the firms sought a large percentage of high-quality fruit, crews with a high proportion of rotating, unregistered labourers were not appropriate. The firms begun to scrutinize data on performance and registration of labourers and to pay more attention to quality. By 2009, eleven firms were ready to offer foreign markets a certified brand, 'All Lemon', which identified fruit of high quality and a specified juice content.

The ATC also stressed the importance of registering labourers, and after 2007 UATRE and the tax revenue office began a serious campaign to monitor the registration of harvesters (Amengual 2011). This task will become easier once all labourers receive their labour cards, a task that will take several years. In response to these pressures, one major vertically integrated firm is now experimenting with a bar-coded bracelet with the labourer's registration code, crew membership and the name of the service firm that hired him (Bulacio 2009). It is unclear how frequently the bracelets will be checked; nevertheless, the experiment reflects a considerable commitment to the registration of seasonal labourers. The largest of the firms now checks the registration of workers hired by their contractors by accessing the records of RENATRE (National Registry of Rural Labourers) and the records of AFIP (Federal Public Revenue Administration), and delays payments when contractors fail to register all workers. Stressing quality and legality, however, has exacerbated tensions between producers and labour contractors, and redefined the relationship amongst them, a point discussed in the section on contracts.

This transformation of the production, packing and exporting process was achieved during an uncertain economic period. In 2002, Argentina defaulted on its debt, bank accounts were blocked and the dollarization of the economy ended. The economy began to recover 2 years later, but inflation forced producers to grant wage increments. In 2008, the basic wage of harvesters and packers was 55 Argentine pesos, 129 per cent above the 2004 basic daily wage, which contributed to a doubling of the cost of the harvest and packing of fruit. Commercial costs have also escalated by 148 per cent during the same period.[18] To cope with the rising cost of production, producers and the ATC are trying to gain entry to new markets; while some success is in sight, entry to the coveted US market remains blocked. Producers are also trying to reposition themselves in the commodity chain by diversifying their exports and investing in new varieties of citrus. One very large firm has also invested in land in Uruguay and South Africa.

V. Becoming a Labour Contractor

Information about labour contractors was gathered from interviews with twenty of the thirty-five labour contractors that we were able to identify through contacts with managers, farmers and the labour union. Half (nine out of eighteen) of the aspiring contractors emerged

[18] The basic wage is the wage negotiated by UATRE and the ATC. Since inflation rate and price index estimates by government agencies after 2004 are no longer reliable, it is not possible to deflate the wage and cost figures.

Table 4. The background of labour contractors and their clients in the lemon industry of Tucumán in 2001

Labour contractor	*Background and job experience*					*Major clients*
	Farmer	*Labourer supervisor*	*Transport*	*Accountant*	*Various*	
Small, 1–2 crews	3					Small-to-medium farmer
			1			Small farmer
		2				Medium farmer/firm
Medium, 3–10 crews	1					Firms/packers
		1				Big farmers/small firms
				1		Medium to-large farmer/packer
Large, over 10 crews	5					Firms
				2		Firms/packers
					2	Firms
Totals	9	3	1	3	2	

Sources: Information was gathered from interviews with eighteen of the thirty-fivee labour contractors that we identified through contacts with managers, farmers and the union. It was harder to trace small labour contractors, which are probably underrepresented.

from the sector of citrus producers.[19] Some were sons of well-established farmers who were waiting to inherit, yet wanting to establish themselves in some profession related to their experience and training; others, having inherited their share, realized that it was no longer large enough to allow them to make ends meet; still others were established small-to-medium farmers in need of capital to expand or renovate their citrus orchards. Producers and their kin were in an advantageous position to become providers of harvesting services because of their experience, and their access to the required equipment (bags, ladders and bins) and to a vehicle to transport their crew. They were also well known to other local producers and could easily amass a list of clients. Five of the nine sons of farmers became service providers to large firms (see Table 4). Accountants were the next group of entrepreneurs looking for new business opportunities and also most likely to succeed. The ones we interviewed had worked in business firms and handled payroll issues, an important experience for large citrus clients who wanted to minimize the financial impact of social security and medical insurance costs. These candidates balanced their lack of expertise on citrus agriculture and harvest management by selecting a partner with this background.

There were also some truck owners cum middlemen who offered to harvest the industrial-quality fruit they purchased. But these agents were vulnerable to the fluctuations of the market and suffered when the price of industrial-quality fruit began to fluctuate dramatically after 1970; many of them went out of business. Aspiring crew leaders who saw the expansion of the industry as an opportunity to become independent agents suffered a similar fate, unless they were coaxed and supported by the firm that hired them. We encountered three who had been

[19] In 2000 and 2001, Ortiz interviewed eighteen contractors (twelve service firms and six small labour contractors). A survey by Aparicio's team in 1999 detected another large service firm and two medium firms that we were not able to contact. A list from UATRE identified three other service firms or labour contractors not noted by the teams. Few of the small labour contractors are registered in UATRE, and thus it is hard to estimate their number and even harder to monitor their activities. That situation might change in coming years.

crew leaders; only two of them had managed to succeed by partnering with a better-endowed friend. After 1994, when the union won its demand that harvesters should be transported in buses, rural bus transporters who had been hired by the larger farmers realized that they could cut costs by also offering labour recruitment services. They engaged or partnered with friends who had experience in managing a labour crew and familiarity with the citrus harvest. These aspiring contractors often connected with important clients, but failed to sustain their activities in later years when crews became more stable.

Social networks were the prevalent client search engine for all labour contractors. It was easier for ex-crew supervisors and sons of small farmers to negotiate the first contracts with a known client (a kinsman, neighbour or ex-boss). It was also less risky, as they were likely to be able to evaluate whether the client would pay promptly. Small contractors could not sustain payment delays – as it impaired their ability to recruit good workers, their basic asset. All contractors interviewed who serviced large firms were also either known to the harvest managers of the firms or had been introduced by a mutual friend or patron. But to succeed, these candidates needed access to capital to invest in the equipment (computers and Xerox machines), and the management capacity required to service the larger firms (e.g. secretarial assistance and accounting and legal services). To coordinate and monitor a large number of crews, the labour contractors also needed a team of supervisors. By 2001, the large firms expected contractors to have the financial capacity to handle at least ten crews of harvesters (Table 4). There were nine successful service firms operating in 2001, with about 800–2,000 harvesters each.

The background of over half of the known labour contractors and managers of service firms indicates that they are both deeply enmeshed within the farming community, have lived the ups and downs of the industry, have shared resentment of the strictures imposed by the *Ley de Contrato de Trabajo* and have identified with their clients. In this context, class difference has had little impact on negotiations. Until 2000, many of them openly admitted not meeting the legal requirements for all of their labourers, stating that they could ill afford to do so. To save money, they tried to hire a larger number of young single men who preferred ready cash to social security. However, since 2001, well-established contractors who are registered as service firms have been more cautious about their agency's practice and more circumspect about the *Ley del Contrato de Trabajo*, as government agencies have begun to monitor labourers' registration. After 2004, compliance increased as UATRE became more engaged with registration monitoring by facilitating the task of the inspectors (Amengual 2011). Furthermore, some of the large co-responsible firms have begun to pressure their service firms as labourers have begun to sue their employers over failure to register them. By 2009, all seasonal packing plant personnel were registered (Amengual 2011). The percentage of registered harvesters is uncertain.

VI. Labour Contractors and Their Clients: The Role of Contracts

While producers had turned to subcontracting in order to control rising labour costs and enhance flexibility, by 2000 the producers' concern shifted from the cost of labour to a care for quality. This shift was reflected in the contractual negotiations between the major vertically integrated producers and their labour contractors. Firms were no longer focusing on the proportion of unregistered labourers that they would allow; instead, they focused on improving efficiency, an issue that in one firm became the subject of workshops attended by heads of service firms, contractors and heads of departments that dealt with the harvest. Another central issue was payment deductions when the percentage of fruit unsuitable for export surpassed the stated tolerable level. Firms argued that contractors did not duly supervise workers who were being paid by the amount harvested. The contractors countered that the firms called them to harvest when the weather conditions were unsuitable and the fruit was more likely to be damaged. It is a hard call, and firms may err when they are under pressure to fulfil an order. The contractors also complained that bins into which to deposit the fruit were not always delivered on time. But this complaint may have reflected a conflictive set of interests, rather than an administrative failure. The number of bins sent is related to the amount of fruit that the firm requires them to harvest on a particular day. Labourers and contractors prefer to harvest as much as possible within the day, to maximize earnings. Under these circumstances, it is impossible to devise a clause that unambiguously assigns responsibility for any damage. Responsibility has to be negotiated on a case-by-case basis, or by re-evaluating the tolerable percentage of damaged fruit. The contractors argue that the second option is the only viable contractual solution, but only as long as the rate relates to the rate paid by the firm for their harvesting service. The firm managers argue that the service rate is adequate if contractors would strive to improve crews' performance, and ensure reliable transport and administrative efficiency.

Cost increases related to inflation (e.g. wage increases, equipment and transport costs) were not seen as problematic, since they were laid out in the budget proposal drawn up by the contractors. There might be some disagreements, but contractors assured me that they were easily resolved and were incorporated in the service rate. Thus, the basic contractual rate, rather than the variable costs, is the point of contention between firms and their contractors. Of note, the basic rate is not a market rate; nor is it related to the market price of the fruit. Rather, it is a traditional rate that varies only with the volume of fruit to be harvested, the cost of the services requested and inflation.

Labour contractors who service large firms complain that the basic rate is set by the firm, and is hard to negotiate because the firms are more powerful and in a better bargaining position. One labour contractor commented that it is easier for the firm to terminate a contract when the relation becomes confrontational, while it is hard for a contractor to walk away, as his harvesting crews are his most important asset and may not follow him. Several contractors depicted themselves as the disadvantaged partner, whose marginal earnings have declined since 1994, while the firms' profit margins have increased. Some complained that payments are often delayed, which requires them to borrow cash – a controversial claim.[20] One contractor suggested that the only solution was to form a federation of contractors and negotiate with the large firms as a group, but such efforts have been unsuccessful. The advantage of an industry-wide negotiation of the basic rate is that it would allow contractors to bargain for the inclusion of compensatory clauses that would protect them from losses for which they are not responsible: clients' misjudgements or inefficiencies and strikes or walkouts over contractual conditions negotiated by producers' representatives and UATRE. However, it is just as difficult to set appropriate compensation and to ensure compliance as it is to set a tolerable rate of damaged fruit. Furthermore, most contractors prefer to reduce tensions, favouring patience with more collaborative firms.

Some firms, for example, compensated contractors when the firm erroneously asked them to send crews to an orchard. Most firms agree that they should strive to improve efficiency and coordination by investing in labour-saving equipment and improving harvesting methods (for a description of the introduced ancillary strategy, see Ortiz and Aparicio 2006a). Clearly, firms

[20] Large firms that favour sanctions may threaten their contractors with payment delays for missteps or failures to register labourers. In the case of medium or small producers, payment delays may reflect cash flow problems or a conflictive relationship.

that invest in collaborative relations with their contractors regard contract negotiations as encounters in which they can engage in problem-solving discussions about transport and supply bottlenecks, the assignment of orchards according to quality and distance, weather-related harvest cancellations, and other conflicts and inefficiencies. The value of contracts is that they can facilitate transparent exchanges and help contenders to focus on the need to negotiate a workable relation. Firms that are able to build 'calculative trust' are in a better position to control malfeasance, particularly when the manager and the contractor share similar values and a similar social background.

Some vertically integrated firms preferred to hire a number of smaller contractors and offer assistance that would allow contractors to cover their fixed costs and increase capacity as the firm's orchards expanded. One large firm mentioned that supportive assistance implied: investing in the training of administrative personnel; resolving problems of mutual interest; recognizing efforts and honesty; and supporting contractors who need help. These producing firms hoped that this policy would foster loyalty and a positive long-lasting working relation; four out of eight service firms had been working for the same client for at least 8 years. Yet, other vertically integrated firms prefer to absorb some losses in order to distance themselves from contractors' problems. Still other firms terminate contracts with service providers as soon as their relationship becomes problematic. Termination can seriously affect the career prospects of a large contractor, as his reputation would suffer, as well as his ability to retain his most reliable and efficient crews. None of these policies are fixed and firms often waver in response to bad experiences or contractors' demands.

While supportive strategies may lead to long-lasting co-operative service exchanges, recent inflationary trends and pressures to register labourers have encumbered the producer–labour contractor relationship once again. Efficiency is now a shared objective, but performance and registration of harvesters remain the major concerns of the producers. The use of sanctions can become part of the problem instead of its solution. Proactive measures taken by some producing firms are more costly, but have been more successful; for example, workshops to work out solutions to repetitive problems, fair allocation of worksites, and maintaining an oversight team of supervisors in the orchards that can check on the performance of contractors' crews and is available to resolve difficult situations.

In contrast, a labour contractor who services smaller producers or packers probably shares the same class status as his clients and is able to set their own service rates. But this ability relates more to his bargaining power than his social status. Contractors who are experienced, have reliable crews and have connections with packers and factories that could ease the prompt sale of the fruit, have considerable bargaining power. Furthermore, these contractors are freer to walk out without fearing the loss of their crew. They set their rate following market guidelines and their evaluation of the orchard conditions, truck access, the volume of fruit likely to be harvested and the equipment facilitated by the client. The contractor's estimated rate also depends on whether the fruit is destined for export, the national market or industry. The rate is then adjusted to the percentage of workers that have to be registered. These labour contractors also negotiate payment schedules. The majority of the contractors serving small producers preferred a verbal agreement, in case their initial evaluation of the fruit volume and quality was not sustained, or if labourers walked out because they could not earn enough. When the contractor is uncertain about a timely payment for his services, he might request a signed contract to use as a threat rather than a tool for enforcement. But he is unlikely to sue, as such a move would attract attention over the contract and its compliance, especially about the percentage of unregistered labourers, which tends to be much higher in this sector than amongst service firms. Furthermore, smaller producers are unlikely to sign such documents, as they are legally co-responsible for the acts of contractors. One contractor who reported a very large loss and another who reported disagreements about requested services never brought their cases to court.

Small contractors are unobtrusive within a rural farming environment and find it easier to evade registering their small group of harvesters. But that may change in the coming years, because in June 2011 the provincial government passed a law (Law 8.427) creating a register of agricultural and industrial labour contractors. The provincial tax office was made responsible for compiling the register and ensuring compliance with social security tax contributions. If the law is actually implemented, the nature of harvest subcontracting will change drastically.

THE SWEET CITRUS INDUSTRY IN NORTH-EASTERN ENTRE RÍOS[21]

I. The Initial Period

Oranges and tangerines have thrived in north-eastern Entre Ríos, and its closeness to major consumer centres has enticed producers and middlemen to expand the orchards, following the recommendations of the two agronomic research centres in the region. By 1962, a large local family firm with orchards and packing plant had built a juice processing plant. Access to credit and lifting of import duties for industrial components, during the 1960s, made it possible for two other larger producers to modernize their packing plants, with a third firm opening an industrial processing plant. These expansions stimulated the growth of a supportive service sector, but were hindered by the inability to compete in price with juice exports from Brazil (Tadeo et al. 2006).

II. Expansion of the Industry

By the early 1970s, four vertically integrated firms had begun to explore foreign fresh fruit markets, following the trend set by Tucumán lemon producers (see Table 5). However, these sweet citrus producers continued to rely primarily on the national demand, increasing the number of tree varieties, which allowed them to supply the national market with fresh sweets citrus throughout most of the year. Unlike Tucumán, Entre Ríos did not face a similar political turmoil during the 1970s. The Social Agreement achieved by the federal government and the labour unions offered a wage rise in exchange for a 2-year suspension on wage negotiations and a respite from strikes. But another related policy, involving price controls, affected returns in the national fresh fruit market. The four vertically integrated firms responded to these policies by investing in production for export and productivity enhancement at all levels of their chain. One large firm went beyond those aspirations, investing in the production of bags and wooden boxes, and even building a sawmill. These investments did not improve revenues, because economic instability and high inflationary trends during the 1980s curtailed returns in all markets.

[21] This section is based on the field research directed by Nidia Tadeo and carried out in Concordia, Entre Ríos, between 2001 and 2005. The researchers interviewed members of the local branch of National Institute of Agrotechnology (INTA), the local labour union and the Federation of Citrus Producers, as well as many labourers and producers. Tadeo also carried out a survey of 200 harvesters and another one of packing house labourers in 2002. The sample was based on information from the labour union's register. The information was updated through contacts with the labour union and producers who use labour contractors. The research was financed by the National Agency of Scientific and Technological Research. It focused on the labour force and the transformation of the industry.

Table 5. The growth and transformation of three agro industries: lemons, sweet citrus and tobacco

National developments[a]	*Year*[b]	*Lemons*	*Sweet citrus*	*Tobacco*
The initial period				
High inflation; price controls; instability	1922		Start production; national market	Small producers; national market
	1950	Small orchards; local markets	Stagnant production	
Inflation controlled; access to credit	1964	Industrialization of fruit; firms integrate vertically	Industrialization of fruit; firms integrate vertically	Production for export; large farmers, sharecropping
II. Expansion of the industry				
Military dictatorship	1974	First fresh fruit exports; major labour strike	First fresh fruit exports	Expansion; electrification of area; irrigation
	1976	Persecution of labour leaders		
Return to democracy; hyperinflation; limited credit	1983	Orchard expansion; low productivity; juice and oil drop in price	Growth of exports; national market retracts; small firms suffer	Reabsorbing management; residential labour force; harvesters return annually
III. Subcontracting the harvest				
Neoliberal policies; dollarization; encourage exports; low-cost agro inputs; pro-industry policies	1991	Orchard expansion and improvements; more vertically integrated firms	Climatic disaster; loss of orchards	Contract farming
	1992	Subcontracting 'pseudo co-operatives'	Subcontracting 'pseudo co-operatives'	'*Sacha*' labour contractors
	1994	Major labour strike; 'pseudo co-operatives' banned		
	1998	Service firms	National market plummets; bankruptcies	
IV. The impact of high quality standards				
Default on debt; devalued national currency; limited credit; inflation; unemployment	2002	EUREP-GAP regulations update packing	Reactivate exports; invest; commercial and industrial co-operatives	Union protests against delayed wage payments; diversification of production
	2004	Strict EUREP-GAP norms; increased costs; increase controls; stronger union	Illegality of 'pseudo co-operatives'; service firms; direct hire; reactivate exports	

[a] National events and policies that affected the industries and subcontracting strategies.
[b] The year is used as a chronology marker rather than to convey of exact date of the event.

Nevertheless, exports continued to grow through the 1980s, mostly to Europe, but at a lower rate than in Tucumán (see Table 3). Family firms began to disappear and the largest firm suffered.

III. Subcontracting the Harvest

The divergent paths of the lemon and sweet citrus industries became evident during the 1990s, when the dollarization of the economy increased the cost of labour and chemical inputs. The added costs of sweet citrus production were coupled with climatic disasters that affected fruit quality and destroyed many orchards in Entre Ríos. Producers were not in a position to compete in the international market. Exports of fresh fruit dropped even after the orchards recovered. The producers faced another serious setback when demand for sweet citrus in the national market shrank, with prices plummeting in 1998 to half of what they had been in 1995. Some producers coped by diversifying production or selling land, but a significant number of producers, including the largest vertically integrated firm, went bankrupt. Unlike Tucumán, where small growers have switched to other activities, in Entre Ríos small producers who own from 24 to 50 hectares still devote most of the land to citrus production.

It is not surprising that producers searched for ways to circumvent labour taxes to reduce wage costs and resorted to subcontracting the hiring of labourers through 'pseudo co-operatives' in order to survive. These agents appeared in Entre Ríos at about the same time as in Tucumán and were organized along similar lines (Tadeo and Palacios 2004). The system appealed to large and small producers, because it served to lower costs and allowed for greater contractual flexibility at a time when some producers needed to downsize and packers were reorganizing and forming consortiums (Tadeo and Palacios 2004). Producers also mentioned that they favoured subcontracting because it allowed them to distance themselves from labourers and unions. This last preference is a bit surprising, since in Entre Ríos the Union of Fruit Workers, which had represented workers since 1961, fearing mass firings, avoided adopting a confrontational style.

'Pseudo co-operatives' assumed responsibility for the hiring and supervising of harvesters, as well as the hiring of personnel required by packing plants. This shady system of subcontracting diverted attention from government agencies by disbanding every few years and reappearing under different names. But the ruse was not crucial since, unlike in Tucumán, the local government or the labour union showed little interest in challenging their existence during the decade of the 1990s. Small and medium farmers relied instead on small labour contractors who tended to avoid registering their labourers.

IV. The Impact of High Quality Standards

The return to a national currency, whose value after 2002 was no longer pegged to the dollar, reactivated exporting industries despite the reintroduction of exporting taxes. The five large vertically integrated producers in Entre Ríos had already invested in new packing technologies and renovated orchards with shorter and more productive trees, with fruit suitable for export. Three of these firms also expanded their orchards. One of the firms now has 7,000 hectares under production, more than the largest firm in Tucumán. However, the other two vertically integrated firms prefer to purchase most of the fruit that they pack, including a limited volume of late- and early-ripening sweet citrus varieties from neighbouring provinces. In the latter case, the fruit is purchased by contractual agreement, specifying agro-technological requirements and the terms of the transaction. The adoption of 'contract farming' for a tree crop is unusual, and distinguishes the Entre Ríos growers, packers and exporters from their counterparts in

Tucumán. Forming associations was another distinguishing strategy for small and medium producers and packers who engaged in the export of fresh fruit to Europe. Two of these associations expanded and eventually registered as independent firms. But perhaps the most significant difference is the multiplicity of small producers. The 1995 census lists 1,454 producers in Entre Ríos and 515 in Tucumán. The 2004 census for Entre Ríos indicates that 41,977 hectares planted with sweet citrus were owned by 1,779 producers. The 2005 census for Tucumán indicates that the 33,921 hectares planted with lemons were owned by only 619 farmers.

After 2004, growers and packers had to deal with the same onerous requirements imposed on exporting lemon producers: high quality, restricted use of pesticide and fungicides, and traceability of produce. Also, the entry of cheap citrus fruit was effectively discouraged. These requirements favoured large, vertically integrated firms and well-endowed producers' associations. As in Tucumán, small producers could participate in the export market only indirectly, as suppliers to vertically integrated firms. Their salvation was their closeness to a large and vibrant national demand for sweet citrus. But after 2000, the national market began to experience changes. Carrefour and other expanding international supermarket chains that had become established in large cities began to require sanitary and quality standards and certifications similar to those required for export. These chains are coveted not because they pay higher rates, but because they comply with payments and contractual obligations, which is not a prevailing norm in Argentina. Some medium and smaller producers who on their own could not position themselves in the export market came together in consortiums, jointly packing and applying for accreditation in order to supply these valued supermarket chains. Less qualified, smaller producers instead commercialized their fruit in wholesale markets or through middlemen.

In Entre Ríos, these changes coincided with the 2004 ruling (Law 25.877) that the so-called co-operatives were illegal, as they did not comply with the statutes for co-operative organizations. As in Tucumán, some of the 'pseudo co-operatives' have resurfaced as 'anonymous societies' or 'societies with limited responsibility' and new service firms have appeared, amongst them a subsidiary of a foreign firm. Given the importance of quality performance, export producers have indicated that they favour direct hiring because it allows them to select more stable personnel that they can recall annually, making it worthwhile to invest in training and offering better and safer working conditions. It is thus not surprising that a 2002 survey of 200 labourers indicated that 26 per cent of the labour force was hired directly by producers, 8 per cent through service firms, 31 per cent by small labour contractors and 35 per cent by 'pseudo labour co-operatives' that were still operating, whose clients are packers processing fruit only for the national market. But as yet, the extent to which labourers' earnings have improved is unclear (Tadeo 2008).

V. Becoming a Labour Contractor

Given that sweet citrus producers were beginning to subcontract during a decade of high unemployment and contraction of the industry, it is very likely that most aspiring labour-contracting candidates were, as in Tucumán, small producers or their sons. Another contingent of aspiring candidates were the supervisors or crew leaders in the respected large family firm that closed. To have worked for the firm was a high recommendation, which endowed them with experience and contacts with other producers. A third contingent of aspirants were transporters who served many producers and had a truck to ferry labourers to and from the orchards. The other important asset of aspiring labour contractors was contacts with the social world of unemployed labourers.

The cost of opening a 'pseudo labour co-operative' was similar that of becoming a small labour contractor in Tucumán. They only had to provide labourers with ladders and bags, whereas other tools were the responsibility of the so-called self-employed labourers themselves. They had to own a truck in order to transport labourers, or team up with someone who did. Many of these candidates cut costs to a bare minimum and avoided notoriety by failing to register the 'co-operative', relocating the office and changing its name with great frequency. Independent contractors who serviced only farmers who produced for the national market were also able to offer a cheap service by avoiding the cost of registering most workers and failing to pay their share of social security taxes.

In Entre Ríos, the demand for labour contractors was high and contractors competed against each other and the remaining 'pseudo co-operatives' by offering a cheaper service, which they could manage only by paying lower wages and failing to register their harvesters. A weak labour union and minimal control allowed small contractors to pursue this strategy until 2002.

However, after 2002, it became costly to open a viable labour contracting agency. Tools, required work clothing and harvesting equipment, including expensive bins, had to be purchased. Furthermore, contractors that serve packer–exporters or suppliers to international supermarket chains now need to comply with all of the labour laws, including the registration of most of their labourers, and hire trained office personnel who are able to handle the required paperwork and are proficient in computer skills. Contractors also have to handle payrolls and prepare estimates and budgets for their clients. In Entre Ríos, the estimates are more complicated because labourers are sometimes paid by the day or by the amount harvested, or by a combination of a basic minimum wage plus a bonus for productivity. Not surprisingly, some of the firms that service large exporters of sweet citrus and blueberries are headed by accountants who in some instances are members of the producers' families that they serve. Since 2005, in order to survive, smaller labour contractors in the sweet citrus industry have diversified the services that they provide. Instead, large service firms have tried to attract nearby blueberry producers. In this way, they can offer their crews year-round employment and attract more reliable and experienced harvesters, an advantage not shared by service firms in Tucumán.

Contract negotiations in Entre Ríos seem to be more flexible than in Tucumán, but since few contractors were approached, there is little information about the ongoing relation with farmers and large export firms. We only know that the service rate depends on the services required, the amount of fruit to be harvested, whether the fruit is for export or for the national market, and whether the producer requests a return of the same workers year after year.

OTHER MODES OF SUBCONTRACTING: THE TOBACCO INDUSTRY[22]

I. The Initial Period

Tobacco production has a long history in Argentina, particularly in regions with a strong peasant population. Jujuy was one of the four provinces where small producers with no more than 10 hectares, and with the help of the family, became the major suppliers of tobacco in the national market. By 1960, larger landowners began to invest in Virginia tobacco production for

[22] This section is based on research by Susana Aparicio and her collaborators in 1973, 1991–6 and in 2007. Daniel Re was one of her collaborators and has updated Aparicio's earlier research. Her research has focused on the transformation of the industry, technological innovations and investments, the impact of agrochemical, the labour force and subcontracting. The research was supported by the University of Buenos Aires, CONICET (the International Council of Scientific and Technical Research) and SAGYPA (the Department of Agriculture).

export, but very few reserved more than 50 hectares for this crop. Based on estimates, Corradini (2006) suggested that the more land producers owned, the less land they allocated to tobacco production. This feature and crop diversification distinguishes tobacco farming from the citrus industries and allows farmers to retain a higher contingent of labourers for most of the year.

However, large landowners preferred to concentrate on their other farming activities and delegated the management of tobacco production to other agents. They divided the area devoted to tobacco into allotments and assigned them to sharecroppers (Aparicio and Grass 1997). Sharecropping was common in this region, attracting Bolivian migrants, many of whom prospered and were able to start their own farms. Indeed, by 1970, 48 per cent of the tobacco sharecroppers were Bolivians (Salas 2000, 347).

The sharecroppers received a prepared parcel of land, commensurate with the available family labour, and were responsible for hiring and paying labourers, if extra help was needed. They also received from landowners the required inputs (seed, fertilizers, drying equipment, kindling) and an advance payment to cover family expenses, including housing. No contracts were signed, but traditional rules defined the relations between the sharecroppers and the owners (Salas 2000). Upon delivering the harvest, the sharecropper received a percentage of the value of the crop, reflecting the contributions made by each party (usually close to 50%).

Although landlords valued sharecropping because it allowed them to disengage from managing the harvest, they also valued savings in labour costs, which represented about 50 per cent of the value of all inputs.[23] Economists have argued that sharecropping also allows producers to reduce certain risks; for example indebtedness due to loss of harvest or low prices. However, this did not seem to be the case in Jujuy. The sharecroppers did not always attend to their obligations. In some cases, they abandoned the site if the crop failed or if they were unlikely to earn a fair share. Landowners complained that in many cases they were not able to recoup advances and costs. They stressed that some losses were the result of failure on the part of sharecroppers to follow guidelines.

II. Expansion of the Industry

In contrast to the lemon industry, the tobacco industry was consistently and heavily supported by the government. In 1967, in an attempt to stabilize the tobacco market by regulating its production, General Onganía's government created the Tobacco Technological Fund (FET). Eventually, the FET also became a facilitator of the industry, helping it to expand, modernize and diversify (Bertoni 1995). It succeeded in these goals by redistributing the revenues from cigarette taxes across the production chain (Bertoni 1995).

Unlike the lemon industry, where the four largest firms had their own packing and processing plants, tobacco producers formed their own co-operative in 1969 to facilitate the commercialization of tobacco (Aparicio and Grass 1995). The co-operative negotiated an annual production quota with its members, offered credit to buy inputs, extended technical assistance and purchased the tobacco harvested. The co-operative processed the tobacco leaves

[23] In tracing the political history of California's strawberry labour market after the Second World War, Miriam Wells (1996) notes the reasons for the adoption of sharecropping and the success of the legal challenge by sharecroppers that led to a return to direct hiring of labourers. Roberto Benencia (1997) explored the historical transformation of modes of production in some sectors of the horticultural belt around the city of Buenos Aires. In this area, producers engaged Bolivian migrants as sharecroppers in order to attract reliable crews of labourers while avoiding the costs of seasonal recruitment and social security taxes. Robertson (1980, 1987) explored the "ability to bring privately held resources into flexible productive relationships through sharecropping arrangements".

Table 6. The distribution of tobacco-producing units by size and the percentage of the total land under tobacco

Year	*Up to 10 ha*		*10.1–50 ha*		*More than 50 ha*	
	% of farms	*% of ha*	*% of farms*	*% of ha*	*% of farms*	*% of ha*
1972	57	n.i.	n.i.	n.i.	n.i.	n.i.
1988	40	12	53	60	7	28
2002	28	6	57	47	15	47

Sources: For 1972, Aparicio and Grass (1995, 72); for 1988 and 2002, Aparicio (2007, 32).

before selling it and also strategized to find new markets. In 1970, the co-operative commercialized 20 per cent of the tobacco produced (Aparicio and Grass 1995) and in 2002, 89 per cent (Corradini 2006). The rest of the harvest was sold under contract to a factory that contributed with its own inputs and sent personnel to supervise the production process, a variation of 'contract farming'.

The 1970s was a decade of rapid expansion of tobacco production, stimulated by a growing national demand and by the government's investment in the construction of a dam that brought electricity and irrigation to farms. The productivity of land and labour increased with irrigation and the installation of gas ovens to dry and cure the leaves. These improvements reduced the labour costs from 225 days per hectare to 125–153 days, leading larger producers to expand the area planted with tobacco (see Table 6), which grew from 7,259 hectares in 1960 to 19,765 hectares in 1991 (Re 2007; Aparicio and Re forthcoming).

III. Partial Subcontracting of Recruitment of Harvesters

The modernized tobacco industry was now in a good position to take advantage of export opportunities. The co-operative offered them guidance, with market estimates, planting and crop diversifying advice. The Chamber of Tobacco Producers also played an important role as mediator in the formulation of national tobacco policies (Aparicio and Grass 1995). It is thus not surprising that producers and distributors opposed Menem's attempts to liberalize the tobacco market, preferring instead a more gradual process of adaptation to the dollarization of transactions, the restructuring of the economy and new demands of markets (Bertoni 1995).

As in the citrus industries, the modernization of production required tobacco producers to redefine tasks, and reorganize management procedures and hiring policies. A landowner with more than 50 hectares planted with tobacco could no longer distance himself from managerial responsibilities. Sharecroppers ceased to be useful agents and their numbers decreased, from 28 per cent in 1970 to 11 per cent in 2007, although the area planted with tobacco had increased by 33 per cent (Aparicio 2007). Some of the ex-sharecroppers became small producers, or settled in towns or peri-urban areas, working as seasonal labourers in agriculture or construction.

By 1990, producers who had more than 50 hectares planted with tobacco needed to pay full attention to the crop and required the year-round assistance of skilled labourers and crew leaders (about ten per hectare). From September to December, they also needed to hire many seasonal labourers; about thirty-three per hectare in September and eighty-three per hectare once the harvest had started (Aparicio and Re forthcoming). Some of the required labourers had to have special skills.

Presently, most of the permanent personnel live on the farm and members of these families are hired for seasonal tasks; they comprise 42 per cent of the harvest labour force. Other seasonal workers live locally and are hired when they come to ask for a job (25% of harvesters in 1970), usually encouraged by a kinsman or friend who works on the farm (23% of harvesters). Some of these seasonal labourers are registered and return to the same farm in subsequent years. If they are not needed when they approach the farm, they might be told to come back at a specified future time. High unemployment, a weak union and a readiness to welcome solicitations ensure a ready supply of seasonal labourers.

Only when there is fear of a labour shortage do landlords or their foremen go to the central square of the nearest town, where the rural and urban unemployed congregate and wait for recruiters. They exchange bids, bargain and seal a deal for the day or the week. Alternatively, a landlord approaches a familiar contractor. In 2007, 10 per cent of harvesters were hired through labour contractors (Aparicio and Re forthcoming). These contractors are known as '*sacha* contractors', or false contractors, because their request does not generate a contractual relation; they are not asked to assume a risk or to cover costs. '*Sacha* contractors' are basically transporters who own a truck or large car and pick up passengers en route. But they also have contact information about unemployed labourers who are looking for a job. For a stipulated fee per labourer, these contractors are willing to commit themselves to bringing the requested number of labourers and returning them to their home town at the end of the day. If the labourers are needed the following day, the contractor will again pick them up and return them home. Each labourer is paid directly by the farmer or his foreman, not by the contractor. However, the labourer may have to pay the contractor a small fee for job finding and for transport, but we have no idea how the fee was determined, as Aparicio and Re were unable to interview '*sacha* contractors'. This mode of contracting is very informal and very open to exploitative practices, but it differs from the labour contractors of the 1800s in that indebtedness cannot now be used to enslave labourers. None of the labourers supplied by '*sacha c*ontractors', and only about 50 per cent of the seasonal labourers that are hired at the farm gate, are registered. The producers have no fear of being detected.

Producers also have no fear of union demands, since the regional division of UATRE, unlike the one in Tucumán, is not very active or combative. According to their negotiated contractual agreement, labourers in the tobacco industry receive fewer benefits and their wages are 9 per cent lower than in Tucumán.[24] The union and the labour office also fail to sanction some serious lapses in the industry. They do not monitor whether producers comply with the labour contract and whether they are paid in a timely fashion. In 2002, 8,000 labourers had not been paid for 4 months, a state of affairs that repeats itself almost annually, and that UATRE has been unable to resolve. In 2002, UATRE considered blocking highways to protest against delays in wage payments (*La Nación* 2002).

CONCLUSION

The case studies of the two citrus and tobacco industries (as well as of those quoted in footnotes 1–4) illustrate that tasks may be subcontracted at different points in the development

[24] It is hard to estimate difference in real incomes, even for the same year, because cost-of-living estimates are not reliable. More significantly, they can hire a 15-year-old who, according to the union contract, is paid 30 per cent less than an adult labourer, and an 18-year-old, who is paid 10 per cent less. The contract sets a 6-day week and allows for a 12-hour day for those engaged in drying and curing tobacco leaves.

of an industry, and may be triggered by different factors and different political–economic circumstances. In the case of tobacco, during the 1960s, large landowners with diversified farms decided to invest in the production of Virginia tobacco. In order to free themselves from new and demanding managerial responsibilities, they chose to subcontract the production process to sharecroppers. This strategy also ensured low production costs. In the 1990s, as the federal government signalled the endorsement of more flexible neoliberal economic policies, citrus producers in Tucumán and Entre Ríos attempted to regain the hiring and firing low-cost flexibility that they lost with the passing of the Labour Contract Law by partially subcontracting the management of the harvest. Although not mentioned in interviews, producers were also aware that subcontracting would assure low labour costs and offer them some protection from industrial action. Labour cost reductions were relevant issues in both cases and probably in most subcontracting decisions, but not necessarily the only major issue for the adopted strategy. The gaining of flexibility and efficiency were probably more salient issues for producers who were exporting perishable fruits and vegetables through newly configured marketing chains that linked them to a specific set of consumers.

It is unclear whether in the tobacco industry the decision to subcontract production or the harvest and the choice of agent was based on a careful evaluation of the options. This may not have been necessary, since tobacco is an annual crop and if it is deemed inappropriate, the decision can easily be reversed. For tobacco producers, sharecropping was a familiar institution and Bolivian labourers, known for their discipline and hard work, were commonly present. Yet producers also commented on the risk of non-compliance, which resulted in financial losses. Unfortunately, there is no information about how tobacco producers responded or about the significance of the risk. None of the producers relied on labour contractors as major suppliers of seasonal labourers. They accessed labourers through '*sacha* contractors' only when there was a shortage of hands.

In the citrus industry, the large firms were the first ones to hire harvest contractors or 'pseudo co-operatives'. Given the dearth of information about these agents and associated *transaction costs*, a firm's decisions to subcontract must have been framed as *gambles*; in the lemon case, the *gamble* may have incorporated a protest message. The rush to terminate the employment of most permanent labourers by one firm and the lobbying efforts and protests by the ATC suggest that changes introduced by the Labour Contract Law played a significant triggering role. It is worth noting that lemon producers with 100–200 hectares were initially reluctant to hire contractors, but when interviewed in 2001, four out of ten were subcontracting the harvest, the rest either selling the fruit on the tree or letting their foremen handle the harvest. Most producers with less than 100 hectares were selling the fruit on the tree. These two groups of producers explained that the hassle of ensuring a steady supply of harvesters and transporting them to the orchard was the reason for subcontracting. Several of them, however, reversed their decision after a few low-quality performances or service delays that affected the value of their harvest.

Subcontracting was not the only option available to lower costs, gain flexibility and increase efficiency. For example, instead of expanding their orchards, large vertically integrated producers could have engaged smaller producers in 'contract farming', like some sweet citrus producers in Entre Ríos. Also, a higher percentage of farmers with 200 hectares in orchards could have sold the fruit on the tree. A large survey about the reasons for and choice of harvesting procedures would have elucidated the factors that guided harvest management decisions. Follow-up interviews about how options are ranked and sorted would have helped to predict impending changes and reveal the dynamics of the process. Unfortunately, the citrus research teams did not have the financial resources to accomplish those tasks. Such enquiries are essential for an understanding of the transformations of subcontracting systems that are carried out by problem-solving individuals following social and cultural guidelines and mindful of constraints.

The three case studies also highlight the direct and indirect costs of the chosen subcontracting strategies and the ancillary strategies introduced to facilitate a smoother subcontracting relation with lower *transaction costs*. The most pervasive ancillary strategy throughout all industries in Argentina was to avoid registering a certain proportion of hired labourers in order to reduce employers' social security payments.[25] Large firms allowed their own subcontractors to register only a stipulated percentage of labourers, but this "rule" placed many labouring families below the poverty line. This ancillary option is no longer viable in the citrus industries, particularly in Tucumán. Bolstered by the government's efforts to increase tax revenues and the demands of European supermarkets for quality and for socially responsible practices, inspectors and labour unions are collaborating to monitor the registration of labourers. But the linkages and the commitment of each of the relevant agencies depend on which political faction controls national and provincial governments, and the potential tensions between unions and politicians. If monitoring is allowed to lapse, producers and contractors will profit from lower labour costs and less contentious negotiations, but labourers will suffer.

A second ancillary strategy, common in the three industries during periods of easy access to cheap credit, was to invest in technology that increased the productivity of harvesters and reduced the number of required labourers. A related ancillary strategy in industries where the commodity can easily be damaged was to introduce equipment and procedures that eased the task of the harvesters. These last two strategies favour contractors, producers and labourers contributing towards a lasting collaborative relationship. However, some of these strategies are costly and used only when produce prices are high and markets demand quality. The sweet citrus producers could not afford them and were forced to delay labour-saving investments until the present decade, in order to rebuild their participation in the European market.

But ancillary strategies could not resolve the *transaction costs* emerging from potential tensions in the contractual relation between service providers and large firms. At the root of the problem are the competencies and personas of the agents that the market for services attracts. In the case of the lemon industry, the market initially attracted agents with limited training in the required tasks (e.g. administrative and accounting tasks). Some had never been trained as mediators or supervisors. It took time and help from their clients for service firms to improve their performance and to acquire the necessary equipment. Unsuitable services led to losses, distrust and higher transaction costs. More savvy and forward-looking managers used contract-negotiating encounters to resolve tensions and foster trust, but conflictive areas of self-interest remained.

In the lemon industry, harvest subcontracting – as well as many of the original service firms – have survived for nearly 18 years. In the sweet citrus industry, the 'labour co-operatives' remained in operation for about 12 years, at which point they were forced to transform into service firms, as their legality was questioned. Initially, in both citrus industries, the task of the service firms was to reduce labour costs and clients allowed subterfuges in order to achieve it. This freedom of action helped labour contractors to mediate between the self-interest of capitalists and the state. But as market imposed tighter health and produce quality standards after 2001, the service firms became more dependent on assistance from their clients. They needed

[25] Estimates vary according to sources. According to INDEC, 58 per cent of all private-sector employees in urban centres were not registered in the labour office in 1991, 47 per cent in 2001 and 41.4 per cent in 2010. It is common knowledge that the percentage is higher in the rural sector, particularly amongst young labourers. According to a local newspaper, 70 per cent of agricultural labourers had no social security in 2000 (*La Gaceta* 2011).

to upgrade their equipment and retrain their staff to match performance with the new demands. Some years later, when the market stressed issues related to social responsibility and government agencies demanded the registration of workers, clients began to assert greater power over their contractors and service firms. Some clients adopted non-collaborative scrutinizing tactics (e.g. checking of payrolls and registration of attending harvesters) and threatened sanctions (e.g. payment delays). These transformations hampered the contractors' original *mediating* role. But these changes also opened up new possibilities to service firms. They motivated some producing firms to extend support and incentives to their service firms, converting independent agents into 'quasi-partners' – what a head of a service firm termed 'being part of our major client's firm but outside of it'. Instead, labour contractors became 'management facilitators', attending to their client's goal rather than their own, thereby losing some autonomy. Some contractors resolved this alliance dilemma by becoming more efficient in their service, while others chose to expand the range of services provided or increased the number of clients. The strategy chosen reflects the background of the contractor and the expansion of his social network.

Subcontracting and reintegration follow one another as each strategy reaches its effective limits either because *transaction costs* outweigh benefits or political and economic conditions change. Smaller, independent or associated, producers in the two citrus industries and well-protected tobacco producers were in a better position to reintegrate tasks; hence they could shift between options with greater frequency. But large, vertically integrated, lemon firms that required thousands of harvesters working in scattered orchards could not easily reabsorb the management of all of the harvesting tasks. They compensated for *transaction costs* by redesigning their relationship with labour contractors and by repositioning themselves in the commodity chain by diversifying their commercial activities. These pressures and limitations raise the issue as to whether subcontracting, a key service in the production process, allows for adaptability to changes in mercantile and political conditions, and whether it is an appropriate form of governance in an industry that requires quality performance and expects harvest labour contractors to absorb high fixed costs over a short season.

We hope that our findings about the transformation of subcontracting will help researchers to identify and understand realistic and theoretically significant variables for future, more ambitious, comparative studies about modes and viability of subcontracting.

REFERENCES

Aguilera, M.E., 2001. 'Modalidades de Intermediación en la Contratación de Cosecheros Citrícolas en Tucumán'. In *Antiguos y Nuevos Asalariados en el Agro Argentino*, eds S. Aparicio and R. Benencia, 15–26. Buenos Aires: La Colmena.

Albert, B., 1984. 'The Creation of a Proletariat on Peru's Coastal Plantations: 1880–1920'. In *Proletarianization in the Third World*, eds B. Munslow and H. Finch, 99–120. London: Croom Helm.

Alfaro, M.I., 1999. 'Los Espacios para la Negociación Laboral en la Citricultura Tucumana: Actores y Estrategias. Disciplinamiento, Conflictividad y Resistencias'. *Estudios del Trabajo*, 18: 39–57.

Alfaro, M.I., 2000. 'Los Trabajadores Rurales en un Mercado de Trabajo Moderno: Las Condiciones para la Construcción de la Protesta Social'. Informe final de Beca de Perfeccionamiento UBACyT, mimeo. Buenos Aires.

Alfaro, M.I., 2001. 'Trabajadores Rurales y Sindicalismo Agrario en la Argentina: Avances y Deudas Pendientes'. In *Antiguos y Nuevos Asalariados en el Agro Argentino*, eds S. Aparicio and R. Benencia, 227–49. Buenos Aires: Editorial La Colmena.

Amengual, M., 2011. 'Labor Inspectors and Unions: Enforcement in Argentina'. International Labor Organization, Second Conference on Regulating for Decent Work, Geneva, 6–8 July.

Aparicio, S., 2007. 'Trabajo, Mercado de Trabajo y Cultura en Jujuy'. Manuscript: Instituto Gino Germani, Universidad de Buenos Aires.

Aparicio, S., and C. Grass, 1995. 'Una Burguesía Dinámica en el NOA: Los Tabacaleros Jujeños. In *Agroindustrias del Noroeste, el Papel de los Actores Sociales*, eds N. Giarracca, S. Aparicio, C. Grass and L. Bertoni, 69–94. Buenos Aires: Editorial La Colmena.

Aparicio, S., and C. Grass, 1997. El Mercado Trabajalero en Jujuy: Un Análisis de los Cambios en la Demanda. *Estudios Sociales del NOA*, 2 (1), Instituto Interdisciplinarios Tilcara, Universidad de Buenos Aires.

Aparicio, S., and D. Re, forthcoming. 'Cambios en el Mercado de Trabajo Tabacalero y Formas de Contratación de Asalariados Transitorios'. In *Tercerización y Trabajo Agrario*, eds S. Aparicio and R. Benencia. Buenos Aires: Editorial La Colmena.

Aparicio, S., P. Berenger and V. Rau, 2004. 'Modalidades de Intermediación en los Mercados de Trabajo Rurales en Argentina'. *Cuadernos de Desarrollo Rural*, 53: 59–79.

Aparicio, S., S. Ortiz and N. Tadeo, 2008. 'Have Private Supermarket Norms Benefited Laborers? Lemons and Sweet Citrus Production in Argentina'. *Globalizations*, 5 (2): 167–82.

Aparicio, S., M. Catania, M.E. Iturregui and M. Palomares, 1987. 'La Legislación del Trabajo: Análisis y Propuestas'. *Aproximaciones*. Buenos Aires: Centro de Estudios y Promoción Agraria.

Armstrong, A., 1988. *Farmworkers. A Social and Economic History* 1770–1980. London: B.T. Batsford.

ATC (Asociación Tucumana del Citrus), 1996. 'Laboral'. *Noticiero*, 34, March: 13–15.

ATC (Asociación Tucumana del Citrus), 1997. 'Flexibilización Laboral'. *Noticiero*, 38, September: 4–6.

Baer, W., P. Elosegui and A. Gallo, 2002. 'The Achievements and Failures of Argentina's Neo-liberal Economic Policies'. *Oxford Development Studies*, 30 (1): 63–85.

Batista, A.E., 2002. *El Complejo Agroindustrial Limonero y su Articulación Territorial en el Piedemonte Tucumano*. Málaga: Departamento de Geografía, Universidad de Málaga.

Bendini, M., and M. Radonich, eds, 1999. *De Golondrinas y Otros Migrantes: Trabajo Rural y Movilidad Espacial en el Norte de la Patagonia Argentina y Regiones Chilenas del Centro-Sur*. Buenos Aires: Editorial La Colmena.

Benencia, R., ed., 1997. *Area Hortícola Bonaerense: Cambios en la Producción y su Incidencia en los Sectores Sociales*. Buenos Aires: Editorial La Colmena.

Benencia, R., and G. Quaranta, 2006. 'Los Mercados de Trabajo Agrario en la Argentina: Demanda y Oferta en Distintos Contextos Históricos.' *Estudios del Trabajo*, 32: 81–119.

Bertoni, L., 1995. 'Complejo Tabacalero y la Intervención Estatal' In *Agroindustrias del Noroeste, el Papel de los Actores Sociales*, eds N. Giarracca, S. Aparicio, C. Gras and L. Bertoni, 45–68. Buenos Aires: Editorial La Colmena.

Bigsten, A., P. Collier, S. Dercon, M. Fafchamps, B. Gauthier, J. Gunning, A. Isaksson, A. Oduro, R. Oostendorp, C. Pattilo, M. Soderbom, M. Sylvain, F. Teal and A. Zeufack, 2000. 'Contract Flexibility and Dispute Resolution in African Manufacturing'. *Journal of Development Studies*, 3 (4): 1–37.

Bour, J.L. 1997. 'Reforma del Mercado de Trabajo en la Argentina en los '90'. In *Mercados Laborales en los '90: Cinco Ejemplos en América Latina*, 132–202. Buenos Aires: CIEDLA.

Brass, T., 2004. ' "Medieval Working Practices"? British Agriculture and the Return of the Gangmaster'. *Journal of Peasant Studies*, 31 (2): 313–40.

Bulacio, F., 2009. 'En Busca de una Señal'. *ATC Noticiero*, 73: 16–17.

Campi, D., 1991. 'Captación y Retención de la Mano de Obra por Endeudamiento: El Caso de Tucumán en la Segunda Mitad del Siglo XIX'. In *Estudio Sobre la Industria Azucarera Argentina*, ed. D. Campi, 179–212. San Miguel de Tucumán: Facultad de Economía, Universidad Nacional de Tucumán.

Campi, D., 1993. 'Captación Forzada de Mano de Obra y Trabajo Asalariado en Tucumán, 1856–1896'. Anuario, Cátedra de Historia Económica. Facultad de Ciencias Económicas, Universidad Nacional de Tucumán.

Corradini, E., ed., 2006. *Provincia de Jujuy: Explotaciones Agropecuarias Tabacaleras en la República Argentina*. Secretaría de Agricultura, Ganadería, Pesca y Alimentos.

Daniel, C.E., 1982. *Bitter Harvest. A History of California Farmworkers 1870–1941*. Berkeley, CA: University of California Press.

Dolan, C., 2009. 'Virtue at the Checkout Till: Salvation Economics in Kenyan Flower Fields'. In *Economics and Morality: Anthropological Approaches*, eds K. Brown and L. Miligram, 167–88. New York: Altamira Press.

Favre, H., 1977. 'The Dynamics of Indian Peasant Society and Migration to Coastal Plantations in Central Peru'. In *Land and Labour in Latin America*, eds K. Duncan and I. Rutledge, 229–52. Cambridge, UK: Cambridge University Press.

Fisher, L., 1953. *The Harvest Labor Market in California*. Cambridge, MA: Harvard University Press.

Friedland, W., A. Barton and R. Thomas, 1981. *Manufacturing Green Gold*. Cambridge, UK: Cambridge University Press.

Garsten, C., and T. Hernes, 2009. 'Dilemmas and Paradoxes of Ethical Conduct in Transnational Organizations'. In *Economics and Morality: Anthropological Approaches*, eds K. Brown and L. Miligram, 189–210. New York: Altamira Press.

Giarracca, N., C. Gras, K. Bidaseca and D. Mariotti, 2000. *Tucumanos y Tucumanas: Zafra, Trabajo Migraciones e Identidad*. Buenos Aires: Editorial La Colmena.
Granovetter, M., 1985. 'Economic Action and Social Structure: the Problem of Embeddedness'. *American Journal of Sociology*, 91 (3): 481–510.
Griffith, D., and E. Kissam, 1995. *Working Poor. Farmworkers in the United States*. Philadelphia, PA: Temple University Press.
Grossman, L., 1998. *The Political Ecology of Bananas: Contract Farming, Peasants and Agrarian Change in Eastern Caribbean*. Chapel Hill, NC: University of North Carolina Press.
Harris, J., 2003. ' 'Widening the Radius of Trust': Ethnographic Exploration of Trust and Indian Business'. *Journal of the Royal Anthropological Institute* (NS), 9: 755–73.
Hart, O.D., and B. Holstrom, 1987. 'The Theory of Contracts'. In *Advances in Economic Theory*, ed. T.F. Bewley, 71–155. Cambridge, UK: Cambridge University Press.
Hartman, T., 2008. 'States, Markets and Other Unexceptional Communities: Informal Romanian Labourers in a Spanish Agricultural Zone'. *Journal of the Royal Anthropological Institute* (N.S.), 14 (3): 496–514.
Hasbach, W., 1966. *A History of the English Agricultural Labourer*. London: Frank Cass (first published 1908 by P.C. King and Son).
James, H.S., 2002. 'The Trust Paradox: a Survey of Economic Inquiries into the Natures of Trust and Trustworthiness'. *Journal of Economic Behaviour and Organization*, 47: 291–307.
Key, N., and D. Runsten, 1999. 'Contract Farming, Smallholders, and Rural Development in Latin America: The Organization of Agroprocessing Firms and the Scale of Outgrowers' Production'. *World Development*, 27 (2): 381–401.
Klaren, P., 1977. 'The Social and Economic Consequence of Modernization in the Peruvian Industry, 1870–1930'. In *Land and Labour in Latin America*, eds K. Duncan and I. Rutledge, 229–52. Cambridge, UK: Cambridge University Press.
Korovkin, T., 1992. 'Peasants, Grapes and Corporations: The Growth of Contract Farming in a Chilean Community'. *Journal of Peasant Studies*, 19 (2): 228–54.
La Gaceta, 1994a. 'Citrícolas Amargados por el Sueldo'. 16 June.
La Gaceta, 1994b. 'Policías Desalojan a Obreros Citrícolas'. 19 June.
La Gaceta, 2011. 'En Tucumán se Redujo el Trabajo no Registrado'. 16 December, http://www.gacenet.com.ar.
La Nación, 2002. 'Queja de Trabajadores Tabacaleros'. 27 April, http://www.lanacion.com.ar/375609.
Lorente, F.R., 1984. 'Organización, Productividad y Rentabilidad de las Explotaciones Limoneras en la Provincial de Tucumán.' Manuscript, Instituto Nacional de Tecnología Agraria.
McClelland, G.M., 1997. 'Social Origins of Industrial Agriculture: Farm Dynamics in California's Period of Agricultural Nascence'. *Journal of Peasant Studies*, 24 (3): 11–24.
Mize, R.L., 2006. 'Mexican Contract Workers and the U.S. Capitalist Agricultural Labor Process: the Formative Era, 1942–1964'. *Rural Sociology*, 71 (1): 85–108.
Neiman G., and G. Quaranta, 2004. 'Restructuring and Functional Flexibilization of Agricultural Labor in Argentina'. *Latin American Perspective*, Issue 137, 31 (4): 45–61.
Ortiz, S., 1999. *Harvesting Coffee, Bargaining Wages: Rural Labor Markets in Colombia, 1975–1990*. Ann Arbor, MI: University of Michigan Press.
Ortiz S., 2012. 'Decision and Choices: The Rationality of Economic Actors'. In *A Handbook of Economic Anthropology*, new edn, ed. J.G. Carrier, 58–76. Cheltenham, UK: Edward Elgar.
Ortiz, S., and S. Aparicio, 2006a. 'Contract, Control and Contestation: The Harvest of Lemons for Export'. *Journal of Peasant Studies*, 33 (2): 161–88.
Ortiz, S., and S. Aparicio. 2006b. Management Response to the Demands of Global Fresh Fruit Markets: Rewarding Harvesters with Financial Incentives. *Journal of Development Studies*, 42 (3): 446–68.
Ortiz, S., and S. Aparicio, 2007. 'How Labourers Fare in the Fresh Fruit Industry: Lemon Production in Northern Argentina'. *Journal of Agrarian Change*, 7 (3): 382–404.
Ostrom, E., 2010. 'Beyond Markets and States: Polycentric Governance of Complex Economic Systems'. *American Economic Review*, 100: 641–72.
Peppelenbos, L. 2005. *The Chilean Miracle: Patrimonialism in a Modern Free-Market Democracy*. The Netherlands: Wageningen Universiteit.
Piñeiro, D.E., 2008. *El Trabajo Precario en el Campo Uruguayo*. Montevideo: Universidad de la República.
Platteau, J.P., 1994. 'Behind the Market Stage where Real Society Exists. Part I: The Role of Public and Private Institutions'. *Journal of Development Studies*, 30 (3): 533–77.
Raynolds, L., 2000. 'Negotiating Contract Farming in the Dominican Republic'. *Human Organizations*, 59 (4): 441–51.

Re, D., 2007. 'La Movilidad Social de los Productores Tabacaleros de la Provincia de Jujuy'. Paper presented at the Meetings of Young Researchers. Institute Gino Germani.

Robertson, A.F., 1980. 'On Sharecropping'. *Man, Journal of the Royal Anthropological Institute*, 15 (3): 411–29.

Robertson, A.F., 1987. *The Dynamics of Productive Relationship. African Share Contracts in Comparative Perspective*. Cambridge, UK: Cambridge University Press.

Rutledge, I., 1987. *Cambio Agrario e Integración: Desarrollo del Capitalismo en Jujuy, 1550–1960*. Buenos Aires: University of Buenos Aires.

Salas, G., 2000. 'Mano de Obra Boliviana en el Tabaco y la Caña de Azúcar en Jujuy, Argentina'. *Estudios Migratorios Latinoamericanos*, 45: 337–70.

Sánchez Saldaña, K., 2001. 'Acerca de Enganchadores, Cabos, Capitanes y Agentes de Intermediación Laboral en la Agricultura'. *Estudios Agrarios. Revista de la Procoraduría Agraria*, 17: 37–103.

Selwyn, B., 2009. 'Labour Flexibility in Export Horticulture: A Case Study of Northeastern Brazilian Grape Production'. *Journal of Peasant Studies*, 36 (4): 761–82.

Sosnick, S.H., 1978. *Hired Hands: Seasonal Farm Workers in the United Status*. Santa Barbara, CA: McNally and Loftin.

Strochlic, R., and K. Hamerschlag, 2005. 'Best Labor Management Practices on Twelve California Farms: Towards More Sustainable Food Systems'. Davis: California Institute of Rural Studies.

Tadeo, N., 2008. 'Calidad y Seguridad Alimentaria en Productos Frutícolas Frescos de Exportación: Implicaciones en los Procesos Laborales de la Agroindustria de Cítricos Dulces de Entre Ríos'. *Mundo Agrario*, 8 (16), http://www.mundoagrario.unlp.edu.ar.

Tadeo, N., and P. Palacios, 2004. 'El Empleo Agrícola en el Contexto de una Restructuración Económica Argentina: Los Trabajadores Cosecheros del Citrus en el Noroeste Entrerriano'. *Estudios del Trabajo*, 27: 57–82.

Tadeo, N, P. Palacios and F. Torres, 2006. *Agroindustria y Empleo Complejo Agroindustrial Citrícola del Noreste Entrerriano*. Buenos Aires: Editorial La Colmena.

Thilmany, D., 1995. 'An Analysis of Contract Relationships between Farm Labour Contractors and Farmers in California Agriculture'. *Agricultural Personnel Management Program Report*, 004, ed. C.F. Newton. University of California Cooperative Extension.

Thilmany, D., and P. Martin, 1995. 'Farm Labor Contractors Playing New Roles in Agriculture'. *Californian Agriculture*, November–December, 37–40.

Tversky, A., and D. Kahneman, 2000. 'Rational Choice and the Framing of Decisions'. In *Choices, Values and Frames*, eds D. Kahneman and A. Tversky, 209–23. Cambridge, UK: Cambridge University Press.

Vandeman A., E. Sadoulet and A. de Janvry, 1991. 'Labour Contracting and the Theory of Contract Choice in California Agriculture'. *American Journal of Agricultural Economics*, 73 (3): 681–92.

Vaupel, S., 1992. 'Growers' Decision to Hire Farm Labor Contractor and Custom Harvesters'. , Project Report, University of California, Agricultural Personnel Management Program.

Washbrook, S., 2007. '*Enganche* and Exports in Chiapas, Mexico: A Comparison of Plantation Labour in the Districts of Sosonuco and Palenque, 1876–1911'. *Journal of Latin American Studies*, 39: 797–825.

Wells, M., 1996. *Strawberry Fields: Politics Class and Work in California Agriculture*. Ithaca, NY: Cornell University Press.

Williams, D., 2000. 'Farm Labour Contractors in California: Regulating the Agricultural Work Place'. *Rural California Report*, California Institute of Rural Studies, 11 (2): 1–11.

Williamson, O.E., 1993. 'Calculativeness, Trust and Economic Organization'. *Journal of Law and Economics*, 36: 453–86.

Wolf, S., B. Hueth and E. Lingon, 2001. 'Policing Mechanism in Agricultural Contracts'. *Rural Sociology*, 66 (3): 359–81.

Young, M., 2005. 'Making Things Happen: The Responsibility of Negotiation'. *Socio-Economic Review*, 3 (1): 133–52.