

More to the Picture than Meets the Eye: On the Ultimate Causes behind the Chilean Economic Transformation¹

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Abstract: In the contemporary development discussion on the causes behind the sustained economic growth in Chile since 1985, the predominant canon seldom attach importance to evolving processes taken place prior to the dramatic market oriented shift after 1973. From a long-term development perspective, however, such a view is unsatisfactory and potentially misleading because it tends to disregard the significance of institutional change and the agricultural transformation. Within a framework of long-term institutional change, a reinterpretation of the Chilean economic progress centred on the transformation of the Chilean agriculture is put forward. It is argued that ever since the 1930s a process of social change evolved that helped break down the growth inhibiting traditional institutional order. Specifically, the pressure for modernization, reaching its zenith at the time of the reforms of the latter half of the 1960s, broke elitist economic and political relations and led to agricultural transformation that portended and conditioned the effect of the shift to the market oriented regime of the 1970s and 1980s. *Keywords:* Chile, Chilean economic development, ultimate sources of growth, institutional change, agricultural transformation, equality of opportunities.

The Chilean economic development since the mid-1980s constitutes one of the few contemporary success stories in a low or middle income economy outside Asia. Some of the central characteristics of this economic transformation are sustained income per capita growth, significant poverty reduction and a remarkable expansion of the non-traditional agricultural export sector. Many countries, both in Latin America and in the rest of the developing world, have made serious efforts to achieve similar outcomes by emulating the Chilean market reforms of the last decades with heavy emphasis on liberalization, deregulation and privatization. However, despite decades of market reforms à la Chile, no other country in Latin America has experienced a similar level of economic transformation (see Rodrik 2006). It is therefore reasonable to suggest that there might be other sources, in addition to the market reforms, behind the Chilean growth performance that catching-up countries may learn from. Strangely enough such a discussion has been conspicuous by its absence in the bulk of the literature drawing policy lessons from the Chilean growth record. This paper will make the case that the change in land tenure structure and the demise of exclusive privileges that for generations had restrained productivity growth in Chilean agriculture constitute one such additional source of growth. This process of change, which culminated with the land reforms of the 1960s, was part of a longer history based on the gradual process of industrialization and secular demographic change that in combination with the market reforms composed the impetus for the rise of dynamic elements and the agricultural transformation.

In the framework developed in this paper it is useful to depart from the distinction made by Angus Maddison (1988) between what he called *proximate* and *ultimate* causes of growth and as such the focus will be on the latter. As for the proxi-

mate we find measurable variables that are in general composed into accumulation of factors of production, allocation of resources and innovation. In the context of the Chilean agricultural transformation the proximate causes are for instance the technology shift, the capital accumulation and the exploitation of natural resources. When it comes to ultimate, deeper, causes, the paper follows Maddison's suggestion that the basic social order characterised by *institutions* and *macro-economic policies for growth and stability* should be included and that a change in this set of ultimate causes is necessary for igniting the proximate growth mechanisms.² While it is beyond doubt that a change in macro economic policies has the potential to play a vital role in encouraging development, it has also been recognised in the literature on long-term growth that the development process is bound to be crippled if access to productive resources is only open to a small and often non-dynamic elite, i.e. that the distribution of economic opportunities are concentrated in the hands of the privileged. It is the role of this particular institution that is highlighted in this paper.³

The framework

To clarify the use of the concept of institutions in the context of a discussion on ultimate causes of growth, institutions are seen as 'humanly devised constraints that structure human interaction' (North 1993, 2) and as such they codify human behaviour through the economic and political power relations in society. Furthermore, 'institutions are not necessarily or even usually created to be socially efficient; rather they, or at least the formal rules, are created to serve the interest of those with the bargaining power to create new rules' (North 1993, 2-3). Therefore, in societies where the distribution of economic and political power for a long period of time remains largely unaltered, institutions tend to be path-dependent even in societies where the institutions are socially and economically sub-optimal.

In economics it is an axiomatic conception that security of property rights is a fundamental and economically efficient institution for long-term growth. However, while this comprehension essentially is well-merited, the growth conduciveness of secured property rights is arguably conditioned by the extent to which the property (or economic resource) is used productively. As Engerman and Sokoloff (2002, 2003) have pointed out, the mere existence of well-defined property rights do not guarantee good economic performance in the long run. Property rights might be perfectly secure, but if they are unequally distributed or concentrated in the hands of a small elite, political and social institutions will tend to be exclusive and discriminatory, leading to the establishment of economic institutions that inhibit long-term growth both via unequal access to civil rights but also to economic opportunities. The emergence of good institutions, then, render necessary the breakdown of institutions based on exclusive privileges in order for new groups, or 'new men' with different priorities and ambitions, to arise (see Lewis 1955). For this to happen, *access to productive resources* (for instance property rights) might have to be shifted with or without the consent of unproductive holders of privileges. This was what happened in Sweden, for instance, during the Reduction in the late 1600s, or in Taiwan during the land reform after 1950 – two events that are considered to be of ultimate character in explaining long-term growth in these countries.

This reasoning follows closely the importance Simon Kuznets attached to the role played by egalitarianism in promoting structural change and modern economic growth (Kuznets 1966). Kuznets saw egalitarianism (together with secularism and nationalism), here translated into the abandonment of pre-modern exclusive privileges in terms of inequalities of rights and economic opportunities, as part and parcel of the secular dynamics involved in producing a sustained rise in per capita income. Institutions that promote long-run growth are therefore intimately related to the breakdown of institutions of exclusion. According to pioneers of economic development such as Kuznets or Lewis, this breakdown was not primarily a question of ethics, but an empirical observation of historical experiences of long-run growth. This is also the primary justification for the significance of egalitarianism in the present discussion.

Inequality of rights means that certain privileged groups (typically based on their control over vast economic resources) enjoy rights only shared by a small minority. Rights are in such a context typically based on what socio-economic group individuals belong to. Unequal opportunities mean that access and reward to productive resources for the least advantaged is severely limited, be it in relation to land, capital, education or their own labour power. Unequal opportunities and rights are therefore closely related to the control by small segments of society of excessive economic resources or the labour and political voice of others. It follows that redistributive efforts to strengthen the resource base of some people will always have to affect some other people's rights and access to resources in a potentially negative way. Needless to say, egalitarianism is therefore seldom supported by powerful groups enjoying exclusive rights and privileges. This is also the reason why institutional reform is often pending in places where such reform is most needed (Andersson and Gunnarsson 2005).

The second pillar of this framework is to highlight the role played by agriculture in the development process. The economic history of successful development experiences teaches us almost unanimously that long-term per capita income growth, modernization and poverty reduction is based on the success in intensifying and improving productivity in agriculture (e.g. Bairoch 1973, Mellor 1995, Timmer 2005, World Development Report 2008). Essentially, the two avenues along which agriculture manages to play such a significant role are the direct and indirect effects of increasing agricultural productivity (de Janvry and Sadoulet 2002). Direct effects are the immediate income improvements experienced by the actual farmer. For poor countries where a large part of the population lives in rural areas depending on farm income, the direct effects are particularly significant. In countries that are overwhelmingly urban and in rurally centred countries where off-farm income is important, the indirect, cumulative, effects might be even more significant. Agricultural productivity growth here stimulates overall growth, modernization and poverty reduction through reduced food prices, increased employment opportunities and wage increases in both agricultural and other sectors, foreign exchange earnings and better quality and potentially more diversified food production.

Agriculture can thus be characterized as a potential leading sector, paving the way for the rest of the economy in a process resembling what Myrdal (1957) once characterized as cumulative causation. It is thus reasonable to think that for such a

process to gain momentum, growth inhibiting institutions that stifle dynamic elements need to be dismantled and new productivity-enhancing measures be introduced (for an early argument, see Dorner 1972).

The ultimate causes in previous research

Insofar as the ultimate causes behind the Chilean economic transformation are mentioned, the thrust of the policy-lesson oriented literature seems to take for granted that the shift in macroeconomic policies after 1973 and then again after the debt crisis of 1982 suffice to explain the Chilean success (see among others Bosworth et al. 1994, Edwards 1996, Agosin 1999, Perry and Leipziger 1999, De Gregorio 2004).⁴ The core argument is thus that opening up the Chilean economy and eradicating long-lived subsidies and regulations liberated the market mechanisms and encouraged private initiatives. In addition, sound macro-economic policies managed to lower the chronic ills of inflationary pressure and overvalued currency. As a result, Chile's comparative advantages, not least in agricultural and other primary goods, could be exploited at the international markets. Although hard to deny the importance of these factors, the policy-lesson oriented literature is typically not explicit on the actual dynamics of the growth process aside from implying that dynamics surfaced automatically after the 'fundamentals' were rightly put in place. As regards the agricultural development, its success is often noted in terms of export growth and diversification but hardly any references are made to the changes of the tenure institutions (see for instance Ministerio de Agricultura 1986 and Sparks and Arnade 1995).⁵

In this literature, we are not told for what reason agriculture became successful or why it was already able to hold a central position during the 1970s, or whether or how any *new* dynamic elements arose. To find some clues to these kinds of queries, one has to turn to a body of mainly sociological work that has emphasized the new element of dynamics – the new entrepreneurs – evolving during the military regime. This literature tries to go beyond the strict market explanation in order to find other causes behind the emergence of entrepreneurs. Although it is held that this entrepreneurial class rose to prominence during the post-1973 economic restructuring, it happened either as an unforeseen consequence of the neo-liberal policies (Montero 1990) or due to unintended developmental-state behaviour by the military regime (Schurman 1996). It is a widely held understanding that the main area in which these elements arose was in the export-oriented fruit sector (see for instance Gomez and Echenique 1986, Cruz 1988). Instead of dwelling upon the policy reform per se, this literature tries to capture the driving forces of change, and it is argued that many of these new entrepreneurs had their origins in professional, non-agricultural occupations. Instead of belonging to the traditional elites this group of agricultural entrepreneurs often had a middle-class background. Most of this entrepreneur-oriented literature convincingly singles out the technological shifts, the capital accumulation among the new entrepreneurs, the exploitation of natural resources and the increased efficiency etc. These factors are important in understanding the driving forces of development and the indirect effects of agricultural development, but they constitute the proximate causes. As for the ultimate not much is suggested.

This is, however, partly remedied in a related field of research stressing the revolutionary changes taking place in the agricultural sector. In this literature, however, Chile has not typically been singled out as an undeniable success-case as the agricultural sector itself is often depicted as two-faced where the success of the non-traditional export-sector developed alongside a marginalized, small-scale sub-sector (see for instance Ortega 1987, Gómez and Echeñique 1988, Jarvis 1992, Scott 1993, Gwynne and Kay 1997, David et al. 2000, Kay 2002). What further distinguishes part of this literature from the policy-lessons oriented, market-friendly view are, although without explicit elaboration, the references to the importance of the land reform of the late 1960s in affecting the transformation of the agricultural sector through its detrimental effects on the latifundio system. This implies a conception that the land reform does indeed constitute an ultimate cause regarding the agricultural transformation and thus for long-term growth. But since the land reform process took an unexpected, and for some utterly unfortunate, turn after the coup, the main focus in this literature has in general been on the detrimental effects of the market reforms on the marginalized agricultural actors rather than linking the pre-1973 to the post-1973 periods together to understand the fabric of success of the Chilean agricultural transformation.⁶

For the purposes of historical inquiry and to discuss the ultimate causes of growth it is the *combination* of the period leading up to the land reform during Frei and the pre-and-post 1973 land reform process that needs to be framed in an institutional explanation in which the role of the agricultural transformation is highlighted.⁷

The institutions of exclusion

During the last quarter of the nineteenth-century, Chile was economically quite well-off when compared internationally. Industrialization had been initiated and the export of primary goods during the liberal era of the time meant a steady inflow of foreign reserves (see for instance Muñoz 1968, Mamalakis 1976, Kirsch 1977, Palma 1984). Along with increasing mining and industrial activities and increasing revenues came features of modernization. Urbanization certainly increased and industrial diversification became relatively advanced but, as Kirsch (1977) demonstrates in his landmark study, industry never became a true growth pole, due to the exclusionary nature of the governing institutions. As such, there were no institutions enabling the rise of a new group of people with entrepreneurial spirits. Instead the traditional oligarchy was homogenous and had common interwoven interests in mining, industry, agriculture and politics and the earnings from mining or industry were not reinvested into self-generating capacities to deepen industrialization.

Consequently, and regarding agricultural development, any deepening of the domestic market did not materialize, since ‘the nitrate fields produced a torrent of wealth but paradoxically this went to fortify an elite whose principal value was still landownership’ (Bauer 1975, 229). No doubt, for many urban aristocrats landowning was a status symbol and, more than anything else, a side-investment. To meet the increase in urban demand for food, instead of investing in productivity-enhancing technology, landowners sought ways to increase their use of low-cost

labour. Since population growth was limited and agricultural wages were rising, landowners, instead of competing for waged labour, successfully tried to rely on residential labour (*inquilinos*) to a greater extent (Bauer 1975, 164-65). Agricultural labour therefore became increasingly attached to the large estates in order for the landlords to supply the upcoming markets and keep workers from migrating.

This *inquilinización*, through the provision of higher living standards than migrant workers received, was carried out in the late 1800s as an institutional arrangement that satisfied both the landlords and the *inquilinos* (Bauer 1992, 27). Landlords actively worked against a free labour market, because residential workers were needed to keep the production on the estates stable. Additionally, the availability of new areas to cultivate, through the high land-to-labour ratio, meant that the landowners did not have any strong incentives to increase land productivity. The system survived because it served the interest of those with bargaining power and kept uncertainties under control. 'In general, both the vote of the rural population as well as their labour power were in the hands of the great landowners, and this was the sine qua non of their continuing political power' (Zeitlin and Ratcliff 1992, 79). The institutions did not and, essentially, had never had a set of rules to provide incentives for the improvement for society at large, and according to Kirsch, 'there are few stories of substantial upward mobility of Chileans of modest origin in the history of Chile's industrialization' (Kirsch 1977, 76).

This process of industrialization had two counteracting and significant features after the Great Depression. On the one hand, as international markets became less and less essential to the Chilean economy, relative prices changed through an increase in the price of importables, and the demand for domestically produced goods increased. As a result manufacturing increased, which also strengthened the existing vested interests in favour of increasing protectionism to foster these new industries. On the other hand, it created a slow but gradual break-up of the power of the landed elites as the middle class and urban interests grew.

The (unintended) undermining of the latifundio stronghold

Industrialization, within the realm of import-substituting regulation and the traditional value-system of the elites, continued to propel urbanization and the rise of the middle-class. In the 1930s, population growth rates increased and with industrial expansion, urban population soon out-weighed the rural. As industrialization proceeded, the rate of population growth increased and reached its peak during the 1950s. Low wages in rural occupations served as a push factor to leave the countryside and, as population increased in the cities, the amount of wage-labourers soared. The demand for increasing agricultural output thus became gradually stronger.

For agriculture, population pressure meant greater demand for food and, as long as industrial expansion did not absorb labour into labour-intensive production, which it did not, there was a potential increase of the pool of underemployed labour, i.e. cheap agricultural wage labour. The relative price of residential labour thus started to increase and it became more profitable to engage wage-workers in production rather than residential labour. A gradual process of substituting wage-workers for residential labour began to take place. It then became possible to hire

the labour from former *inquilinos* for the pay of an *afuerino*. Many *inquilinos* thus lost the security they had experienced on the paternalistic hacienda and were forced to join the ranks of the *afuerinos* as they were pushed out of the estates. This dramatically changed the proportions of labour-types within the rural labour force. In 1935, 29.8 per cent were still *inquilinos* and 27.8 per cent were *afuerinos*. In 1955 12 per cent were *inquilinos* and 27 per cent were landless (*afuerinos* or *volutarios*) (CIDA 1966, 293; Bauer and Johnson 1977, 97). In 1965 only eight per cent were *inquilinos* and 35 per cent were landless (Kay 1992, 135). Hence, the main agricultural actors still sought ways to increase profits through lower input costs rather than by investing in technology to increase productivity, let alone institutions to increase efficiency. This situation maintained the low productivity levels. However, the conversion of residential workers into wage labour resulted in stagnating or even declining real wages and the process was almost the reverse of what had happened in the pre-depression period, when the demand for residential workers was high. As a result, growth of agricultural output continued to lag behind and the agricultural sector started to act as a constraint on industrial development.

Between 1950 and 1960, 29 per cent of the total rural inhabitants (equivalent to 12 per cent of the total population) migrated to the cities (Barraclough 1973, 11). The industrial sector, itself far from being a bastion of dynamic expansion, was not able to absorb the workers, and rural industries were not a significant feature since the small-holders were scattered geographically and in general lacked access to capital and markets. Inequality and exclusion was a central part of the problem. In terms of land distribution, 1.5 per cent of the total agricultural population owned estates with an average size of 235 hectares per estate, corresponding to two per cent of the total amount of farms and 55 per cent of total cultivated land (Kay 1992, 137).

However, with the expansion of urban population, the nucleus of power also shifted and, for the first time in Chilean history, the political parties to the centre and left began to take steps to limit the privileges of the landed elite in order to gain popular support (Collier and Sater 1996, 313). The de facto de-inquilinization disrupted the traditional stability of the latifundio system, and urban popular discontent with the traditional social power structure began to grow. In this context the structuralist position – demanding land reform to take action against the anachronism of the latifundio and cure the chronic problem of bottleneck-caused inflation – influenced the politics of economic reform (see for instance Pinto 1959).

The (unintended) political economy of the land reform period (of the 1960s-70s)

Thus, political pressure for agricultural intensification was built up during the 1950s and early 1960s. As rural workers migrated to the cities, they became empowered politically, especially in a context where democratic rights were being spread. As food prices rose, the industrialists eventually lost patience with the landlords, because as urban organized labour grew stronger, industrial wages rose regardless of wages in agriculture. The homogenous nature of elite command over both rural and urban institutions had waned, and the landlords' resistance to changing the tenure system was no longer strong enough.

The objective of increasing accessibility to productive resources partially at the cost of the property rights of the privileged was manifested through a series of ambitious land reforms, most notably land tenure reforms, as well as by clearing land and investing in agricultural R&D, infrastructure and new agricultural technologies (for instance, through the Plan Frutícola by CORFO).⁸ Hence, intensifying and redistributing land was backed by both economic and political arguments, even if the political spectra got increasingly polarized over the issue.

The first attempt to redistribute land from landowners to settlements of small farmers (co-operatives) was made in 1962. Its effect, however, was limited (Wariner 1969, 331-35). In 1964, after the reformist government of Eduardo Frei had succeeded the conservative government of Alessandri, the push for land reform was intensified.⁹ Land-holdings of 'excess size' and of low productivity now became subject to expropriation and turned into settlements (*asentamiento*). Besides, some *minifundios* were also expropriated for the purpose of land consolidation. The *asentamientos* were generally formed into co-operatives as an intermediate step before the settlers decided whether to continue as a co-operative or start to subdivide into individually owned plots. The ceiling of holdings was set at 80 basic irrigated hectares (BIH) (see Thiesenhusen 1971 on details of the process).

Despite problems in executing the reform, agricultural production began to pick up during the 1960s, as the growth rate of agricultural productivity and output rose in the latter half of the decade (FAO 2007). After 1960 there was, for instance, a substantial increase in the use of fertilizers (CIDA 1967) and although Chilean soil provides excellent conditions for fruit cultivation, its advantages had not been exploited until the agrarian question arose on the political agenda in the 1960s. Government assistance was then directed towards fruit growing through clearing areas for plantation and providing credit and technology (Jarvis 1991, 1-4). Furthermore, the rural minimum wage was raised in the early 1960s, as part of the agrarian reform, and reached the level received in urban areas by 1965 (Castillo and Lehmann 1983, 254). Significant improvement was also brought about in the non-reformed sector by the mid-sized agricultural actors (de Janvry et al. 2001) who did not belong to the traditional oligarchy and therefore ran a smaller risk of being dispossessed. Most importantly, these took advantage of the cheap and expanding credit available for farming activities (Castillo and Lehmann 1983, 248).

The land reform process itself, however, took an unexpected turn after the coup of 1973 when the military government finalized the process. The finalization of the land reform under Pinochet has often been described as a counter reform and although the land reform obviously was not carried out in accordance with the original intentions, the most important consequences of the entire reform period was that the sub-optimal use of land characterizing the traditional *latifundio* system came to a close.

Thus, although the military government changed the course of the land reform process, it took advantage of the process of intensification that already was underway (as it took advantage of the fact that copper revenues had become nationalized and subsequently remained in the hands of the state). Most importantly, the expropriation of land during the Frei administration, or the fear of being expropriated, had inescapably altered deep-rooted institutions and attitudes towards agricultural intensification. Consequently, the old elites never regained their former position

(see for instance Ortega 1987 and Martínez and Díaz 1996). Immediately following the coup, the military government exhibited its autonomy in regard to the land holders that had supported the coup when it sternly refused to grant these actors any favours (see Silva 1993). This attitude, while resulting in severe short-term economic stress, also marked the conclusion of the era of state-supported latifundios. Therefore from an institutional perspective, a counter reform, to the extent that it suggests restoring the reforms to the pre-reform situation, is a misleading conception (for references to the proponents of the idea of the counter-reform, see Bellisario 2007).

The rise of the new dynamic elements

Soon after the military government came to power, import tariffs were reduced and agricultural subsidies erased and the tenure system and the size distribution of agricultural lands went through yet another convulsion. In 1965 55.3 per cent of total land was in the form of estates larger than 80 BIH; in 1972 the land in this size category was down to 2.9 per cent and in 1986, after the finalization under the Pinochet regime, it had again increased to 26 per cent (according to the estimate of Jarvis 1992, 199). Within a few years after 1973, 30 per cent of expropriated land was returned to its former owners, 20 per cent was sold to private investors and 50 per cent remained in the co-operative sector, which was divided into family units and sold to peasants (Jarvis 1985).

No doubt, part of the agricultural sector was clearly in disarray from 1975 to 1982. Production (in volumes) of traditional crops and livestock, for instance, did not grow at all during these years (Palma 1995, 192-93). But fruit production for international markets was experiencing strong growth. From 1975 to 1983, the volume of production more than doubled and in 1983 almost 50 per cent of total fruit production was exported (Palma 1995, 192-95). When real interest rates increased after the mid-1970s, many small-holding beneficiaries (many of which had financed their purchased land with long-term loans) suddenly were pushed to sell whatever non-fixed capital they had in their possession, and continue to farm without adequate equipment (Jarvis 1992, 194). As a result, by 1982, 40 per cent of the beneficiaries of land reform had sold their land. Most of the buyers of these lands and capital (livestock and machinery) were the large and medium-sized farms (who had easier access to credit in the international market) in the non-traditional export sector that was already in a process of intensification. The mid-sized farms (10-50 ha) were in possession of nearly 50 per cent of the total area devoted to fruit production by the end of the 1980s (Jarvis 1991).

The new agricultural actors that took advantage of the emerging land market and the availability of inputs were entrepreneurs wanting to intensify agricultural production and cater to the international markets opening up. As Montero (1990) argues, the riskier behaviour associated with seizing opportunities given by the economic restructuring required a new type of entrepreneurial class that was essentially different from the traditional oligarchies. According to Gómez and Echenique (1986), what characterized these modern enterprises in comparison to the old latifundio was that landholding no longer was primarily for prestige and power but a vehicle for maximizing profits. As such the old paternalistic relation-

ships that organized the labour force was outdated, and specialization and market integration were placed far above self-sufficiency and relative stability.

Gómez and Echenique based their study on surveying 45 enterprises in both the export-oriented fruit sector and staple producers in five zones in the mid-1980s. They noted among other things that although some enterprises were unaffected by land reforms (by being smaller than 80 BIH or by being efficient enough), the majority of the enterprises had either directly or indirectly been affected by land reform prior to 1973 (through the expropriation scheme or voluntary sub-dividing and intensification). Furthermore, a significant share of the enterprises had acquired their land through land purchase. The authors noted a striking difference between fruit exporters and staple producers regarding the level of mechanization, where the former was significantly more capital intensive per cultivated hectare. The same pattern was evident when it came to knowledge intensity as indicated by participation of agronomists. In other words, the production of fruits for exports was significantly more costly but it also had a considerably higher rate of return, which seems to confirm that a brand new set of agricultural actors had emerged.

In a similar vein, Cruz (1988) investigated what characterized the fruit sector proper and especially the new dynamic enterprises. He found that the new enterprises had to cope with a new set of technological skills in order to exploit the international markets. These included not only more efficient forms of soil and post-harvest management but also logistics and technology in relation to storage, refrigerated shipping and product standardization. The success in managing to meet these requirements was derived from a complete change in terms of internal organization, capital intensity and receptivity towards new technology of the fruit exporters vis-à-vis other agricultural sub-sectors or producers in the past. Thus, although market opportunities must have been essential to the rise of these new actors, the actual access to land must have been equally so.

The indirect effects of agricultural dynamics

Clearly, in terms of equalization of land holdings, the Chilean land reform process did not resemble the land reform process in East Asia (for example, Taiwan), where the reforms boosted a unimodal tenure structure whereby small family farms came to dominate the agricultural economy. Chilean agriculture remained largely bimodal and the macro-economic development in the 1970s was clearly to the disadvantage of many of the small holders. The direct effects were therefore limited. It was the indirect effects that became important.

An indication of agriculture becoming a driver is that the agricultural sector was the least hurt of any other sector in the Chilean economy when the debt crisis hit the Chilean economy in 1982. The extreme unemployment that peaked at over 30 per cent was not as extreme for agricultural workers, especially for the ones living in rural areas (Banco Central de Chile). After 1984 not only did some of the farming population return migrate from urban to rural areas, but the share of agricultural workers living in the cities also rose substantially (Banco Central de Chile). Agriculture thus came to employ a large number of people situated in both rural and urban areas and agricultural labour increased markedly as a share of the total labour force.

The fact that parts of the agricultural sector could manage to withstand the severity of the crisis is a revealing episode. The most progressive agricultural actors did not go bankrupt during the general recession after 1982, and agriculture as a whole emerged as the central dynamic sector of the 1980s. Both the domestic and export-oriented agricultural sectors experienced productivity increases in the 1980s. As domestic and international demand for Chilean agricultural goods increased, so did employment and income as well. Employment opportunities for female labour increased and created increasing purchasing power and greater self-dependency. Agricultural external trade produced a surplus, and prices for food on the domestic market declined. After a decade of decline of agricultural real wages from 1973 to 1983, real wages for agricultural workers started to increase; between 1983 and 1986 they increased more than urban wages (Jarvis 1992, 205).

Labour directly employed in agriculture declined and was replaced by increasing mechanization in the early 1990s (FAO 2007); perhaps the rise of agricultural real wages speeded up efforts to mechanize agricultural production. But more importantly, the increased use of capital and technology in the evermore sophisticated production process was associated with the fact that large and mid-sized units were more cost-efficient in capital-intensive production, and when market demand increased the income of these farms made it possible for them to raise capital input. It was in the related sectors that labour came to be more intensively used, most notably in the processing industry and in commercial activities. Most importantly, overall poverty reduction, not least through rising wages for unskilled workers in the non-agricultural sector became a substantial indirect effect of agricultural productivity growth (see Anríquez and López 2007).

What is remarkable in Chile is that it has turned the sector that for a long time had constrained the national economy and retarded the modernization process into one that led the way for the overall economy as it became the source of foreign exchange earnings, technological upgrading and employment creation. Comparing 1963 to 1985, the share of agricultural products of total exports increased from 6.3 per cent to 24.2 per cent (World Bank 2007). The share of fruit of total agricultural exports increased from 13.8 per cent to 38.6 per cent (Sparks and Arnade 1995, 2). Even if the later return to democracy, not least for political reasons, facilitated exports of some Chilean products, the ability to compete on demanding international markets (for example, with kiwi fruit, strawberries, salmon and wine) indicates not only the efficient use of productive resources, but also the high quality of goods produced. The initial success on the export markets (Bradford et al. 1992), its subsequent diversification and linkages to other sectors (Schurman 1996, Meller and Saez 1997), and the impacts on the society as a whole (Anríquez and López 2007) clearly constitute a case of the cumulative effects of virtuous agricultural development.

At the same time, there was a continuing growing division between small-scale and medium and large-scale farming (Murray 1997, Kay 2002). One major explanation for the asymmetry was that the fresh fruit sector was highly capital-intensive. Facilities for preparation, packing, storage and transportation were expensive and needed large quantities of produce, which was made possible through contracting small-scale farmers. The credit requirements for small farmers were provided by the large actors and signified strong dependence on the large compa-

nies as well as weak bargaining power. The trend towards land consolidation taking place from the 1990s onwards is thus possibly explained by the greater importance of economies of scale and the cost of acquiring the inputs needed in modern sophisticated agriculture. It is important to note that, as an observable part of the long-term development process, the demise of small-holders is more the rule than the exception and not completely unlike the process of small-holder decline in the immediate post-WW II period in many of today's advanced economies.

It is also important to note that it was not only agricultural goods produced for the international markets that took off during the early 1980s. Production of important traditional agricultural goods, such as wheat, maize and sugar beet, increased rapidly during the 1980s (FAO 2007). The small increase of tariff protection re-introduced after the debt-crisis might partly explain why domestic production increased, but tariffs can hardly be directly responsible for the improvement of yields. For instance, efficiency in sugar production was raised by financial and technical assistance to small-farmers (Gwynne and Bee 1993). Yields were also raised in this type of production in response to intensification (irrigation and fertilizers), and intensification itself was stimulated by increased market demand. The domestic market for sugar, wheat, maize and livestock was thus growing as the purchasing power increased as part of the cumulative process of agricultural change.

Concluding discussion

Ultimate causes of growth, of which macro-economic policies and basic institutions are principal examples, have long been recognized as being central to the possibilities for modern growth to emerge. However, as for elaborating on the ultimate causes for development in Chile, I have argued that the literature drawing policy lessons from the Chilean growth record tends to be excessively vague, and since it does not take into account pre-1973 events and processes, it fails to be convincing as a historical explanation. In the case of other successful development experiences, be it the North Atlantic or East Asian hemispheres, the causes of success are rarely explained by, at least among economic historians, the introduction of a package of macro-economic reforms just prior to economic take-off. It is true that historically recent economic success cases – post-1978 China being a pertinent example, more often than say Britain, the U.S. or Japan – are explained by mere shifts in macro-economic policies. But as history marches on, the discussion on the origins of success, for good reasons, tends to be nuanced, complemented and re-scheduled. I have argued that since the demise and eventual breakdown of the institutions of exclusive privileges in Chile was a real and significant process it should, *in conjunction* with market mechanisms, be accounted for as it provides a more realistic explanation for the emergence of new dynamic elements that led the way for a transformation of agriculture. This transformation constituted, through its indirect effects, a central reason why Chileans at large have experienced increasing economic well-being.

Due to the imprecise nature of understanding the exact role and strength of historical processes and ultimate sources of growth, it will, however, always be possible to maintain the *counter-factual* hypothesis that market reforms alone could

have created the *actual* dynamic agricultural transformation without the prior change of the tenure structure. There are, however, several reasons why this view as a historical explanation is hard to digest. First, just as land reform partly came as a result of the historical processes involving the increasing backwardness of agriculture during industrialization and urbanization (it also, of course, required political vision and energy), the coup and subsequent post-1973 market reforms were in part reactions to the consequences of the land reform process that commenced in the 1960s. The sequences are inter-linked. Related, radical institutional changes against the interest of the elites are only likely to take place when the power of the elites is debilitated. To understand how and why the traditional elites gradually had lost its political and economic hegemony, the recognition of the pre-1973 period becomes central. In historical analysis we are not helped by assuming away actual turns of events that reasonably should have bearing on the historical process we wish to learn from. Second, and perhaps most importantly, on the basis of comparative empirical evidence, market reforms alone have not generated the same results elsewhere in Latin America. The rise of a dynamic entrepreneurial sector with the strength of being a locomotive of development has not been able to surface. This suggests that it is more to the picture than the conventional policy-oriented literature recognizes and that other developing countries, not least in Latin America, should devote some additional efforts in finding ways to dismantle institutions of exclusion and promote institutions for increasing access to productive resources that lies beyond macro-economic policy reforms.

According to the analysis made here, the question of whether the Chilean development will be sustainable and eventually able to lift Chile above the ranks of middle-income countries is dependent on the continuous eradication of institutions restricting access to productive resources. In any society where the income distribution remains significantly unequal, the risks are relatively greater that unproductive holders of privileges with the capacity to influence the institutional set-up will once again emerge to stifle dynamics for continuing development.

* * *

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Notes

1. Acknowledgements: This paper was written as part of the research project 'The Role of Equity in Development' funded by SIDA/SAREC. Financial support from Jan Wallander and Tom Hedelius Stiftelse is gratefully acknowledged. The author wishes to thank Marcelo Tobar for research assistance and participants at the Lund University RUDE-seminar (Rural Development) for inspiring discussions. The author also wishes to thank two anonymous referees for insightful comments and suggestions.
2. The main problem involved in analysing the ultimate causes of growth is the difficulties in finding measurable quantities and therefore the intricacies of appreciating their *statistical* significance. But, as Ziliac and McCloskey (2008) argue, statistical significance should not be confused with *scientific* significance. Not least have the godfathers of quantitative empirical growth studies such as Simon Kuznets, Moses Abramovitz and Angus Maddison all in one way or another emphasized the necessity of trying to grasp the ultimate causes (for instance Abramovitz 1989 and Kuznets 1966).
3. The discussion on the overall growth process in Chile during the last decades, its ups and downs, policy initiatives and attempts is largely left out of the present analysis. For detailed discussion on these matters, see Ffrench-Davis (2001) and Muñoz (2007).
4. Another type of literature opposes the comprehension that Chile should be labelled a success-case (see for instance Moulian 1997 and Collins and Lear 1995). To the extent that growth has been impressive during the last decades, the root causes are to be found in state-led investment programmes until 1973 rather than the market reform post-1973 (see for instance Cypher 2004).
5. However, in a recent background paper to the 2008 OECD Review on the Agricultural Policies in Chile, Sotomayor (2007) briefly mentions the importance of the reformation of the tenure structure during the 1960s. Whether this recognition will be theoretically modelled and feed into the policy-oriented literature remains to be seen.
6. This is of course a legitimate and important approach, but it seems to this author that at times it has overshadowed other important perspectives on the agricultural transformation in Chile.
7. For a recent descriptive piece of work (based on CORA material) approaching the period from the 1960s to 1980 in terms of an interconnecting yet contradictory process of the change from a hacienda system to a modern capitalist economy, see Bellisario (2007). See also Pietrobelli (1993) who argues for the relevance of combining the pre-and-post-1973 periods in understanding the Chilean export diversification.
8. Land reform was also sanctioned by the new U.S. attitude towards Latin America after the Cuban revolution and its drive for Alliance for Progress after 1961.
9. For the justification and social and economic rationale for the land reform, see Thome (1971a); on the change in agrarian reform legislation, see Thome (1971b).

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