

Breaching the Nadu: Lordship and Economic Development in Pre-Colonial South India

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In this article I present a new framework for the analysis of the South Indian economy over the medieval and early modern epochs, centred on the effects of social property relations. I argue that the overall pattern was one of steady economic development, but with a marked increase in trade and commodity development in the early modern era. This is explained through a transformation of intra-class relations that followed the fall of the Vijayanagara Empire. Whereas in the medieval period, economic growth had been subject to the constraints imposed by effective lordly cohesion, which squeezed peasant income and limited trade, this cohesiveness gave way under the hammer blows dealt to it by Vijayanagara rulers. As the South entered the early modern era, lords found themselves without the traditional mechanisms of class organisation, and producers were able to capitalise on their weakness for economic gain. Nevertheless, production still remained peasant based, and, pace some of the more ambitious claims of recent historiography, was oriented toward the minimisation of risk, and not the maximisation of profit. Hence, though there was an increase in the circulation of commodities, this was an artifact of a change within a pre-capitalist regime, and not a harbinger of a transition to capitalism.

I. INTRODUCTION

In recent years, there have emerged two sharply opposed strains in the study of Indian development over the long term. The first continues a long tradition insisting on the retardation of the medieval Indian economy, owing

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to the burden of its cultural and institutional environment.' In this strand of reasoning, the Indian economy, unlike its European counterparts, was burdened by a list of growth-inhibiting factors: a natural environment that was biased against capital-intensive techniques; the presence of powerful and parasitic states which drained the peasant producers of any investable surplus; vulnerability to frequent and bloody wars; and, though this gets less mention now than in the past, the deleterious effects of the Hindu religion.² The cumulative effect of all such factors was that the subcontinent remained a laggard in comparison to its counterparts in Europe.³

In contrast – indeed, in response – to this venerable picture of Indian retardation, there has emerged in recent years a body of literature which points to unmistakable signs of technological and commercial dynamism in the region through the medieval period, which culminated in a remarkable arc of economic growth in the two centuries prior to colonial rule [*Bayly*, 1983; *Perlin*, 1983; *Wink*, 1986; *Subrahmanyam*, 1990a; *Subrahmanyam*, 1990b; *Washbrook*, 1993]. The subcontinent was the scene of the rise of an impressive interregional and transoceanic trading system, prospering under conditions of relative public peace, and remarkably free of state parasitism [*Arasaratnam*, 1986; *Subrahmanyam*, 1990a; *Palat*, 1988]. Far from a laggard, these historians insist, South Asia was in many respects a rival to the European powers of the early modern period, its traversal to a modern economy knocked off-path only by its eventual subjugation to colonial rule [e.g., *Blaut*, 1993].

There is little doubt that the image of medieval India painted by scholars of the first school – a region straining under the burden of a ubiquitous and overweening state, unable to muster much in the way of commercial activity or technological innovation, and consigned to secular stagnation – is overdrawn. The case made by the newer generation of historians for impressive economic growth in the pre-colonial period is by now well accepted. However, while it is established that economic growth occurred, it is not as clear what the forces behind such growth were. The accounts in the more recent literature often remain descriptive, content to point to the evidence for growing trade and regional integration, without addressing the causes of the growth. But without due attention to the issue of causes, it is impossible to arrive at any conclusions about what the limits to early modern growth were: was it in fact growth of a kind that is associated with modern capitalist economies, or was it simply a stretching of the boundaries of the medieval economic regime?

In this article I propose to address this issue as it relates to South India. In particular, I offer an explanation for the rising trade and incomes that recent research has pointed to for the region. I argue that such growth was made possible in the early modern regime by changes in social and

economic institutions of the region, and not from an autonomous increase in trade. Indeed, the latter was itself a creature of the former; that is, it was the institutional changes that made possible the growth in commerce. In particular, I shall argue that it was the erosion of the Nadu – the medieval local assemblies of South Indian lords – that allowed for the economic dynamism of the early modern years. The Nadu in its heyday served as a means of lordly cohesion at the local level, attenuating intra-class competition and enabling more efficient control of labour and trade. Once it was compromised, the immediate effect was to increase lordly competition for labour, as well as freeing up local commerce from political control. This is demonstrated by a comparison of the economic regime of the medieval period with that of the early modern, and it is argued that the kind of dynamism exhibited by early modern South India would probably have not been possible in the institutional environment of the medieval type.

The contrast with the medieval scenario is balanced by an examination of the nature of the early modern dynamism: was it the case, I ask, that upon the erosion of the Nadu, South India in this period was experiencing economic development of a quintessentially modern, that is, capitalist type? I argue that, while it was different from the medieval dynamic in many ways, the growth of the later period was not capitalist. It still remained firmly based on a small peasant production regime, in particular, and was the outcome of production strategies that were still largely market-averse and risk-minimising. While speculation as to the possible future of such a regime is of course difficult, I suggest that, *pace* some of the newer arguments about Indian dynamism, there is no reason to think that South India was on a trajectory to development of a capitalist type. So while the verdict of steady-state stagnation, central to the arguments of one school of scholars, is controverted by the evidence, it nonetheless emerges that their pessimism regarding the developmental path of the region may be warranted.

In making this argument, I thus propose a new interpretation of the factors governing the direction and tempo of South Indian growth over the course of this millennium. This synthesis of existing material on South India will hopefully be of some use, not only in furthering the debate on the nature of economic growth in South Asia, but also for extending the debate on the 'uniqueness' of Europe.

II. THE NATURE AND LIMITS OF MEDIEVAL ECONOMIC DEVELOPMENT

The Medieval Production Relations

While there is some evidence with respect to the economic conditions of the first millennium, the historiography of South India really begins with the

rise of the Chola empire in the ninth century. It is with the Cholas (AD849–AD1279) that settled agriculture came into its own and the property relations that continued into the early modern period were established. An examination of these relations is central to the concerns of this article; not only did they generate the incentive structure that governed economic production, but as Heitzman has noted, their basic elements remained fundamentally unchanged throughout the medieval and early modern period [Heitzman, 1997: 64].

Settled agriculture in medieval South India was, as in Europe, essentially peasant based. The basic unit of production was the peasant family, settled in villages clustering around the fertile tracts in the deltas, and enjoying customary rights to the land. The rich soil and plentiful water made paddy cultivation the main agricultural activity in these tracts; moreover, agriculture in the riverine deltas could sustain multicropping, whether of rice itself, or of rice and other crops. These tracts were thus sources of abundant surplus produce, and throughout the medieval and early modern periods, comprised the economic core of South Indian empires [Ludden, 1985: 20–21, 56–7, 84; Heitzman, 1985: 67–8; 86–7; Appadorai, 1936: 184].

While peasants had customary rights to the land, they did not enjoy exclusive rights to it. Immediately above them as first claimants to the agricultural surplus was a lordly class known as the nattar, who enjoyed superior rights to the land, and could thus claim rental payments from the actual producers. The nattar were not large magnates: Subbarayalu estimates that their property ranged from 13 acres to 65 acres [Subbarayalu, 1983: 173]. This suggests, first, that at least some nattar must have been more like middle peasants relying on family labour, than wealthy lords; second, it is also likely that at this point in their history, most of them probably had their land concentrated in one village.⁴ The nattar were thus a lordly class, holding superior rights to land mostly concentrated in one village, and appropriating rent from peasants who themselves enjoyed customary rights to the land they tilled.

Nattar and resident peasants did not exhaust the elements comprising the agrarian classes. In the riverine tracts especially, the villages were also served by a class of landless labourers known as paraiyar, comprised of the menial castes, who were settled in hamlets outside the boundaries of the main village. The precise economic status of this class is unclear. It is known that its members did frequently have access to some land of their own, suggesting that they were more like counterparts to the English cottars – a stratum of semi-proletarians – than fully proletarianised labourers.⁵ What is more, while paraiyar were not chattel, they do seem to have been transferred with land that was changing hands, suggesting that they were often surviving as bonded labourers, if not serfs proper [Heitzman, 1985].⁶

A final point about the paraiyar is that not every village had its own supply of this stratum; they seem to have been attached mainly to the bigger villages, and their labour shared with the landholders of nearby settlements [Appadorai, 1936: 78; *Karashima*, 1984: 54; *Palat*, 1988: 203]. The availability of the paraiyar as a floating pool of labour was especially functional in these wet tracts, for the labour-intensive nature of paddy cultivation demanded a high supply of labour year-round. While the drier land in the interior districts had long slack periods in the demand for labour, the lands given to paddy cultivation demanded intensive work not only around harvests and sowing seasons, but throughout the year for upkeep of irrigation and soil.⁷

The peculiarities of this regime of production – reliant as it was on irrigation and the mobilisation of relatively scarce labour – were probably important factors behind the form of lordly organisation for which the medieval South is known, namely, the nadu assembly. First, the reliance on irrigation throughout the South meant that the management of tanks and channels in one village frequently had an immediate bearing on the economy of surrounding villages; this demanded some form of supra-village body to adjudicate disputes and enforce responsibilities.⁸ Secondly, and as alluded to above, the recourse to a common pool of paraiyar labour too demanded some form of extra-village body to perform functions similar to those demanded by the exigencies of canal management. Nattar from village clusters thus organised themselves in collective bodies, known as Nadus, which appear to have been the primary locus of lordly organisation in medieval South India.

Again, as with most everything else about the early medieval world, our knowledge of the structure and functioning of the Nadu bodies is scant. We do know, however, that the formation of Nadus pre-dated the rise of the Cholas; that they were cemented by kinship and agnatic ties between the lords, thus being corporate bodies as well as political institutions; and that the Nadu assembly had representatives from each village in its designated area.⁹ Each assembly was thus tied to a particular geographical region, which could vary widely in size;¹⁰ not surprisingly, the term 'nadu' in the medieval sources refers to the region which the assembly ruled over, as well as to the *assembly* itself. In the rest of this article, when referring to the assembly of nattar, I shall capitalise the term – Nadu – to distinguish it from the geographical region (nadu).

Medieval South India was thus ruled in the first instance by a class of relatively small lords, who organised this rule through territorial bodies called Nadu, which collectively managed the economic and political affairs of their members. The formation of chiefly lineages and empires in all likelihood was driven by competition both between and within these

regions. Nattar who were able to mobilise resources through kin-based ties sometimes emerged as powerful nobles within nadu regions. This was particularly so, it appears, in areas bordering the plains, which housed the militaristic pastoral tribes. The importance of military prowess enabled some nattar lineages to rise to superordinate positions within their Nadu assemblies, offering protection to the constituent villages in return for a tribute and, often, land for their clansmen."

This dynamic not only produced the nobility, such as it was, of South India; it was also what drove the rise of a particular lineage – the Cholas – to power as emperors. And once in power, the Cholas had to contend with the fact that the country over which they ruled was also regarded as its own by a class of petty lords and chiefs, and the resources of the agrarian producers, so important to the emergent state, were hidden under the carapace of the Nadu organisation. The nattar and their Nadu assemblies did have to acknowledge the rule of the Chola emperor, the most significant symptom of which was the regular disbursement of a part of their collections as taxes to the state. But the actual control of village-level affairs remained in the hands of the organisations of the lordly class. Throughout its history, the Chola state was therefore locked into an effort to either erode the cohesion of the Nadu, or to somehow bypass it altogether and establish direct contact with the village economy. Before examining the success of the dynasty in breaching the defense of the Nadus, however, it is important to further develop the analysis of the developmental dynamic generated by the medieval economic relations.

Peasant Strategies

The medieval peasant faced two considerations in his calculations about production: the vulnerability of his crop to the uncertainty of the monsoons and the rendering of rent to the local lord. His production strategies were therefore a response to the combined effects of these two constraints, and I shall examine each in turn.

Agriculture in the South has always been crucially dependent on the timely arrival of the monsoon rains – one in the months of June and July, and another in October and November. However, while timely and adequate rains have made for a productive agrarian regime, the monsoons have also been a double-edged sword. The concentrated downpour of the seasonal showers, while important for successful agriculture, also carries the danger of floods; on the other hand, the unpredictability of the rains also makes drought a constant threat to the peasant. While we do not possess a climatic time series for the medieval period, it is unlikely that the pattern of rains was very different from that observed in the modern era, when one or two out of every five years or so has been marked by rain failure [Baker, 1984: 143].

The dual combination of possible flooding on the one hand, and possible rain failure on the other, made agriculture a risky venture, even in the lush riverine tracts of the valleys. The most common response to this on the part of the peasant was a turn toward a *survival* strategy, concerned more with the *minimisation of risk* than the maximisation of production. The typical manifestation of this orientation was a turn toward the cultivation of rice, a crop particularly suited to the monsoon-based rains. But while rice formed the backbone of riverine agriculture, each village also dedicated a certain portion of its land to crops requiring less water – dry crops – which would have a better chance of surviving in case of drought. Each of these responses, while entirely rational given the state of affairs, had the further consequence of inhibiting a turn to more efficient regimes of cultivation. Once rice was established as the main crop in the riverine areas, the irrigation system became geared to the exigencies particular to its cultivation; river water, redirected with dams or collected in tanks, would flow through the arteries of channels into the fields, inundating them for as long as the monsoon lasted. Now, while this was a suitable strategy for paddy, it also meant that other crops which were less receptive to inundation, or conversely, which needed a supply of water for longer than two to three months in the year, could not be grown. Hence, wet crops like betel, sugar-cane, plantain and some spices could not be cultivated to any great extent, even when market conditions made them more profitable than rice [ibid.: 169]. These crops, to the extent that they were cultivated at all in the deltaic tracts, were relegated to the garden lands of the cultivators, or to small patches within the village. But precisely because they were consigned to the periphery of these tracts, these crops could not benefit from the use of scale technology and proper care. As to the first, the simple spatial dominance of paddy ensured that other crops, both wet and dry, would be confined to small patches of land; since they were used as insurance against the failure of the main crop, the emphasis for the peasant was on their simple survival, and not on the maximisation of their output. Furthermore, the commitment to rice carried in train labour requirements which lasted year round; the idea of systematic improvement in the output of garden or minor crops through intensive cultivation was thus remote. Throughout the medieval period they continued to be used as a means of insurance against drought or as a means of extra income. .

Surviving the uncertainties of his natural surrounding induced a kind of economic conservatism on the part of the medieval peasant in the riverine tracts. But seasonal failure was not the only misfortune which recommended caution; there was also the misfortune of being in a relation of tenancy to a lord, and more particularly, of having to surrender a portion of his labour to the latter as rent. It is important to note that, if enforced, .

rental payments would not appear as all that different from a natural force. And such evidence as we have suggests that the nattar were quite stringent in the enforcement of peasant obligations. Even though we lack adequate data on the volume of rent typically extracted by the nattar, we know that it was enough for complaints to be levied by peasants either to the local judicial bodies or with royal representatives; furthermore, it is also known that peasants and village assemblies often had to resort to selling parts of their holdings to make payments, suggesting that the rental obligations were enforced with some rigor.

This certainty in the obligations to local nattar would have the same impact on the Indian peasant as it did on his counterparts in other regions: it acted as a drain on the available surplus, driving the producer into poverty and impeding effective capital formation. What would vary was the product left over after the payment to the lord. The immediate effect of this condition was that whatever little surplus the peasant did accumulate would be stored as a buffer against future vagaries of nature and circumstance. Hence it was not simply that rental obligations made surpluses rare; given the primitive technology and the unpredictable natural conditions, these obligations changed the very function of a surplus – from a fund for investment to a hedge against the future.

This effect of rental payments was reinforced by the fact that the Indian peasant had to frequently advert to the lord for sufficient working capital in each production cycle. In this case, debt payments could not only add to the burden of rent, but could also become a mechanism for the slide into indentured labour or even serf status [ibid: 171.1. The strategy recommended by this state of affairs was therefore to minimise the reliance on the nattar economically, which in turn meant an accentuation of the tendency toward subsistence.¹² To risk market transactions was to risk market failure, and to risk the latter was to court falling prey to the local lord by having to borrow funds for the next season. *Ceteris paribus*, the most reasonable course of action for the peasant was to gear himself towards minimising all possible risks in his production strategy, and to avoid the market altogether.

The Growth Dynamic

The property relations of the Chola period thus established a structure of incentives which reinforced the conservatism generated by the natural conditions. Peasant possession of customary rights to land rendered them substantially insulated from the pressures of the market. The pressures of rental extraction by the lordly class only served to strengthen the resolve toward subsistence, as a means of minimising the likelihood of debt, and the forms of servitude carried in train by it. The orientation toward self-

sufficiency naturally imposed low ceilings on the productivity of peasant plots. Given this state of affairs, the most effective means for lords – and the Chola state – to increase their incomes was through a push outward, extending the agrarian frontier and bringing new land under the plough.. There were two principal means for extending the agrarian frontier: through the grant of new land by the state to Brahmans, and through the establishment of new temples by the nattar and Brahmans. These new temples either organised the tilling of new land themselves, or provided finance for such ventures by the local lords. The increase in the production and circulation of goods brought on by this extension of agriculture in turn generated a third institution which was important to the medieval economic scene, the urban marketing centers known as nagarams. I shall now examine each in turn.

The entrance of Brahmans: The Cholas actively encouraged the emigration of the priestly caste – Brahmans – into the hinterlands by granting them land in outlying villages.¹³ The entrance of this stratum into the agrarian scene has been regarded as a crucial development in the medieval period by historians, and rightly so. This caste actively brought new land under cultivation and thereby increased the tax revenues of the state [Heitzman, 1987b: 814–15; Champakalakshmi, 1987: 77–9; Nandi, 1988]. Some of this new land was simply settled by inducing local peasant producers to engage in the labourious process of clearing surrounding tracts, laying irrigation facilities, and so on, in exchange for initially favourable rates of rent; but, significantly, it also appears that Brahmans were crucial in the incorporation of surrounding aboriginal and pastoral tribes into the agrarian order, usually as labourers, through the assimilation of their folk religions into the Hindu pantheon [Durga and Reddy, 1992]. The spread of new Brahman villages – known as Brahnadeyas – thus added new land as well as labour to the productive base of the region.

Temples: The establishment of new temples was arguably the most important source of growth in the medieval period. Although the Cholas themselves actively promoted some new temples – like the massive affairs at Tirupati and Rajarajeswara – it was the lordly class that was the critical actor here. It was the animating spirit behind the establishment of new temples, and these temples in turn either brought new land under cultivation themselves, or provided finance to the local lords to do the same. Why did the latter patronise temples in this way? For the nattar, the connection was indirect, through the fiscal set-up of the Chola period. Temples presented the nattar with an opportunity to freeze their obligations to the state, while in turn increasing their pre-tax income. The mechanism for this was the

donation of land, or the produce from a certain area of land, to a temple. These donations, which were naturally announced as evidence of lordly piety and devotion, also had the convenient benefit of acting as a sort of tax shelter for the donor. Typically, the donor would hand over a given area of land, with the stipulation that his rights over the land be preserved; in such instances, the donation amounted to a grant not of the land itself, but of its product, for actual control over the plot(s) remained in the hands of the erstwhile owner. The temple would now be in control of the produce of this land, ostensibly in perpetuity, in exchange for the promise of never evicting the donor – so long as the product was faithfully handed over when due.

For the temple, this arrangement had the obvious attraction of ensuring a steady stream of income from the local lords. For the latter group, it had two virtues. The first lay in the conditions for the grant: a donation of a part of the local surplus naturally amounted to its redirection away from the coffers of the state, into the treasury of the temple. For the state, each donation of land or its product by the nattar to the temples thus amounted to a potential loss of revenue. Hence, in most cases, such donations could only be made if the donor first deposited enough money with the state that the interest accruing from it equalled the annual tax. In effect, this was a capitalisation of the tax paid by the nattar. Once this sum was deposited by the donor, he could now move to reach agreement with the temple on the donation. Now, once this three-way agreement between the lord, the state, and the temple was reached, the lord found in his hand two fixed payment obligations; any income over this fixed sum was presumably his to keep, and he was now free to bring new land under cultivation.¹⁴ Each new plot of land on which he could settle peasant cultivators was thus a source of income uncontested by the state.¹⁵

Taken together, the initiatives of the temples, the Brahman landholders, and the nattar propelled the agrarian frontier into the South Indian interior. That the motive for this push was the increase in income for the lordly class on the one hand, and in the revenues for the state on the other, has already been established; it also had the unintended consequence, however, of deepening the extent of commodity production in the region, accelerating trade, and even increasing the division of labour. The establishment of Brahrnadeyas and temples was tantamount to increasing the non-producing population in the agrarian regions, and thus constituted a new source of demand for the cultivating peasantry. This new demand was not only for food and clothing, but also for more exotic articles lining the walls of the temples, textiles for ceremonial occasions, enormous quantities of delicacies and so on. In sum, the proliferation of new centres of consumption not only increased the demand for goods already under production, but also created one for altogether new articles. Because some

of the major sources of this demand were the mammoth temples in the core of the empire, which could not be adequately served by surrounding villages, outlying villages and nadus were pressed into service, and thus integrated into the regional economy.¹⁶ On the one hand, this integration entailed an improvement in means of transportation and in policing of the trade routes; on the other hand, it also demanded a standardisation of the units of account, so that disparate items could be rendered commensurable for means of trade and for the fulfilment of obligations [Heitzman, 1991: 35; also Heitzman, 1985: 509–12]. The growth of temples and Brahnadeyas thus increased the internal demand for goods, while also precipitating the development of technologies to facilitate their circulation.

The *Nagaram*: The integration of the regional economy not only occasioned a greater circulation of goods, it also gave rise to one of the pivotal institutions for medieval commerce, namely, the nagarams, or trading centres. The process of their settlement remains opaque, but it is altogether likely that their growth was directly related to the proliferation of temples, and the increase in commodity circulation which followed [*Champakalakshmi*, 1986: 51; *Champakalakshmi*, 1987: 815–16].¹⁷ Nagarams were frequently assigned responsibility for attending to the material needs of temples and their staff by facilitating the flow of commodities, a task for which they were eminently suited as local trading centres [Hall, 1980: 58,781; what is more, they appear to have established a *modus vivendi* with nearby temples much as the Brahnadeyas did, accepting deposits from temple authorities at a fixed rate of interest [ibid. : 77].¹⁸

Nagarams thus quickly emerged as the pivotal links between disparate nodes in the agrarian order. However, the role of the nagaram in the medieval order was not confined to easing the transmission of goods produced elsewhere; as the demand for greater bulk and specialty items continued to grow with the proliferation of temples, some of the larger nagarams in turn established themselves as centers of artisanal production, and not simply conduits connecting nodes of production and consumption. Their connexion to the temple complex provided ample opportunity for the first genuine leap in petty commodity production, particularly of textiles, brassware and jewelry. Furthermore, as nagarams grew from mere trading settlements to actual loci of production, complete with residential districts and local administration, they became an additional source of demand themselves: both for consumption goods as well as for raw materials.¹⁹ And in so establishing themselves, these settlements fostered an increase division of labour both within their own environs – in the goods experiencing the highest demand, like textiles and metalware – as well as without, especially in merchant occupations.²⁰

Summary: This, then, was the basic dynamic to the medieval period. Production was based on peasant holdings, with the producers secure with customary rights to the land. Given the vagaries of the natural environment on the one hand and the obligations of rent on the other, peasants were oriented to the minimisation of risk rather than to market-oriented strategies. This in turn placed a relatively low ceiling on labour productivity. Given the ceiling placed on productivity, lords found that the simplest strategy for increasing their income was by extending the margin of the agrarian frontier. The colonisation of new land, by the nattar, the brahman villages and the temples thus continued apace throughout the Chola period. The temples were the central mechanism for the expansion of the agrarian frontier – directly, as well as indirectly through their provision of finance; but they also provided the most important source of demand for agricultural and artisanal goods, thus accelerating the growth of commodity production in the empire, and aiding in the rise of new urban centres.

Now, it would be a simple matter to draw a straight line from this period to the seventeenth and eighteenth centuries, with the claim that the explosion of commodity production in the later period was simply an extension of the process initiated in the earlier one. And indeed it is not uncommon for historians of the south to posit just such a linear development, sometimes explicitly, once a respectable economic dynamic is found in the medieval economy.²¹ Of course, there is no doubt that the achievements of the Chola period redounded to the benefit of the later political formations; in this respect there was a genuine cumulative component to the South Indian dynamic. But I shall demonstrate in what follows that to elevate this cumulative aspect of economic development to prize position in the South Indian story is a mistake. In fact, there were important limits to the growth witnessed in the Chola period, and the remarkable economic development of later centuries was made possible by changes which removed some of these impediments. On the other hand, other, more fundamental obstacles remained; to suggest, as some historians do, that South India was on the verge of replicating the European 'miracle'⁷ is therefore a mistake. Let us move, then, to a consideration of the limits to growth in the Chola empire, and then to an analysis of their transformation.

The Limits to Growth

As suggested above, credit for the medieval growth is most commonly attributed to three factors: the growth of temples, the rise of the nagaram, and the expansion of agriculture. Let us examine each in turn.

Temples: It is one of the lasting achievements of modern scholarship to have recognised the economic role of temples in medieval South India. The

discovery of this facet of temples, however, has also clouded the analysis of their limitations as engines of growth in the Chola period. First, it is important to bear in mind that the vast majority of South Indian temples were not like the massive affairs at Rajarajeswaram or Tirupati; they were typically small, local temples, with a reach of a few villages. The capacity of these smaller temples to perform the integrative function attributed to the larger ones was thus remote. Mostly their transactions were confined to the locality in which they were situated.

But more important is another issue: that temples boosted the circulation of commodities in the Chola period through increasing internal demand is not the same as saying that they aided in the development of trade. It is important to remember that the bulk of temple needs were met, not through the purchase of goods at the market, but rather through the redirection of taxes owed by the nattar from the coffers of the state to the temple. In some cases, this simply amounted to a transfer of the agrarian surplus from the state to the temple. In such cases, while the temple constituted a new entrant into the agrarian scene, there was no change in the volume of production. All that changed was its destination – instead of going into state coffers, the taxes went to the temple.

Now, because this also amounted to a loss of revenue for the state, the general policy was for prospective donors to deposit a lump sum of money with the state to defray future taxes, and then proceed to also donate an annual sum to the temple.²² It is this aspect of temple donations which could have been responsible for economic growth. For now, in addition to the normal taxes, which were made over to the temple, donors also had to procure an additional sum to deposit with the state. This would require an increase in the volume of surplus. But the fact that there had to occur a net increase in the surplus says nothing about how it was generated, nor about its permanence. The monies deposited with the state were generally a small multiple of the annual tax; while this sum was not inconsiderable, it certainly was not beyond the reach of the lordly class. Recall that the money was not a multiple of the lord's entire annual income, but rather of the tax due on the particular plot of land being donated to the temple. It thus represented a multiple of the annual tax on only a (presumably small) portion of the lord's land, and could therefore easily have been provided out of the family treasury. In this case, instead of representing an increase in production, the sum deposited with the state would have been an instance of dis-hoarding by monied classes.²³ Now, this could indirectly generate increases in production through financing the expansion of agriculture. I shall return to this issue shortly. For now, if we ignore the money's potential to indirectly aid in the expansion of cultivation, it seems that there need not have been any direct impact of temple donations on economic growth.

Temples continued to meet their needs by consuming the surplus previously headed for the state, or consumed by the lords themselves; the state got its lump sum from the coffers of the nattar.²⁴

Thus, the bulk of temple needs were met through the enforcement of rental obligations on the peasant cultivators, and not through the purchase of goods. But there still remained a quantum of their demand that had to necessarily be met through exchange; this pertains mainly to the demand for textiles, luxury goods, ornaments and so on. It is undeniable that production of these commodities witnessed a measurable increase in the Chola period, and the main source of demand was the temples [*Champakalakshmi*, 1986: 51]. But there were two constraints on the expansion of trade through this mechanism – one direct, and another indirect. As to the first constraint, it flowed from the very source of the demand, the temples themselves. It is important to stress that as non-economic institutions, temples had relatively fixed needs. The ability of any individual temple to fuel local or regional growth was thus limited. Its needs basically represented those of its staff, which was small in all but the massive temples patronised by the Chola kings, and the accouterments of worship. Each new temple therefore did increase the demand for goods, but this increase tended to be one-time in nature, or to grow very slowly. When a new temple entered the picture, it increased the volume of absolute demand, but once the new level was reached, it remained at that level until a new temple was built. This meant that temples were incapable of launching an endogenously reproduced process of development; the growth associated with their consumption needs was episodic, not continual.

The Nagaram: The examination of the indirect constraints associated with the temple complex involves the second agent in medieval development, namely, the nagaram. Temples may certainly have been limited in their direct contribution to growth; but in fueling the increased production of luxury goods and textiles, could they not have indirectly touched off an economic dynamic via the nagarams? It certainly seems plausible to imagine that, once established, the nagaram could have become the locus for concentrated artisanal production, trade, and so on and aided in forward and backward linkages in the production chain. But the conditions surrounding the constitution of the nagaram precluded any such chain of events. First, the capacity for nagarams to facilitate a general commercialisation of the economy was limited by the fact that there was typically no more than one nagaram in every nadu.²⁵ The limit on the number of nagarams need not have been a significant impediment to trade; the centralisation of commerce at one locality can in fact be regarded as an instrument for its further development. That this was unlikely to be so in the

Chola period is suggested, however, by the manner in which trade was conducted in the nagaram. Commercial transactions within the nagaram were conducted within narrowly poetical parameters. Merchants, both local and itinerant, were barred from having independent access to village markets and fairs [Hall, 1994: 66, 82]. All local trade had to be transacted through the nagaram and its authorised merchants. On the other hand, Hall has also adduced instances of local producers being instructed not to sell or barter their commodities to outsiders [ibid.: 66]. What is more, there is evidence for administratively fixed prices for a number of commodities, such as pepper, curd, butter and lentils [Hall, 1980: 118–21; Hall, 1994: 59-60]. What was sold, who sold it, who purchased it, and the price at which transactions were conducted were thus administratively settled. All this suggests that the nagarams were not so much in the business of promoting trade as in regulating it politically.

The significance of the nagarams' regulation of commerce lies in the political conditions within which they were embedded. Hall has shown that nagarams enjoyed a certain degree of administrative autonomy from the Chola state, in the manner of Brahmadeyas and Nadus [Hall, 1980: Chs. 3 and 4]; this should not, however, be taken as evidence for genuine political autonomy. Given the ascendancy of the nattar in the Chola empire, it would be surprising to find an economic institution free from their influence. There is evidence for frequent consultation between the nagaram and the Nadu organisation on affairs of importance for the local economy [ibid.:127]. Consultation, however, need not connote equality of in participation. Nagaram autonomy and political discretion had to operate within the bounds established by nattar power. Hall himself offers evidence for extensive Nadu authority over the granting of trading rights to merchants and over commercial activities more generally, and concludes that 'it was the indigenous administrative institution known as the [N]adu rather than a centralizing government which originally integrated the nagaram into the political system of southern India' [Hall, 1994: 75, 76]. Nagaram commercial activities were thus circumscribed by the political power of the nattar, acting through the Nadu.

It is not difficult to imagine why the nattar were so concerned to check the unfettered development of commerce within the nadu locality. Intensified trade, if left unregulated, carried the potential of creating rivals to established lordly communities. New entrants to the ranks of the lordly class could have come from local and extra-local merchants prospering from independent access to village fairs and producers; conversely, they could have come from the bigger peasant producers with access to distant markets through the merchants. In either case there loomed the possibility of challenges to nattar power in the nadu, an eventuality the latter must have

been anxious to forestall. The regulation of commerce within each nadu by its Nadu organisation was the most natural mechanism to both channel trade so that it increased nattar income, and to ensure that any benefits accruing to other groups remained within acceptable bounds.²⁶

The expansion of agriculture: The potential for temples to set into motion an endogenous process of growth through the nagarams was thus limited by the class power of the nattar. This left the expansion of agriculture as the final source of growth. But the limits on simple agricultural extension to be an engine of development have already been introduced. The chief constraint was that of the property relations themselves. While the cultivation of new land certainly increased the total volume of production in South India, this is not a measure of development *per se*. Despite the growth in the absolute level of agricultural surplus, peasant production still remained conservative in orientation, geared toward survival rather than innovation. And this in turn meant that the extension of agriculture tended to reproduce the existing division of labour, rather than accelerating its growth. So long as the division of labour remained more or less stationary, so did the level of internal demand, giving producers little incentive to take up market-oriented production strategies.

And with this we come full circle – from the existing property relations, to the extension of the agricultural frontier, to the growth of commerce, and finally to the limits on the commerce set by the property relations themselves. None of this is to deny the remarkable growth experienced by South India in the reign of the Cholas. The extension of the agrarian frontier, the rise of the temple complex and the nagarams, and the resulting boost to commodity production were signal achievements. But it is unwise to regard the developments of this era as the initial step on an ineluctable march toward the economic boom of later centuries. The growth experienced in the Chola period was subject to the limits imposed by the existing property regime – the peasant possession of land on one end, and the political power of the nattar on the other. If the former blocked the possibility of growth through an agricultural transformation, the presence of the latter snuffed out development through commerce.

This was the state of affairs faced by the Cholas during their reign. Nattar power presented both an obstacle and an opportunity. On the one hand, the nattar organisation through Nadus generated a shell around local producers, so that any direct contact with the latter by the Chola kings was next to impossible; moreover, the power of the nattar over the disposition of the economic surplus could also be used to build sufficient military muscle to eventually challenge the empire from within. This recommended a direct confrontation with the lordly class. On the other hand, the Nadu presented

the Cholas with a precocious, if nascent, administrative apparatus to wield for themselves if the nattar could be incorporated into the state. And this process also carried the possibility of driving a wedge into the solidity of the Nadu assembly, if the incorporation of the nattar was accompanied by a careful erosion of their cohesiveness. These were not choices to be made in the abstract; the strategy to be chosen was itself dictated by the resources available to the kings. Naturally, given the power and autonomy of the nattar, a strategy of incorporation carried the possibility of sedition. All else being equal, the Cholas would no doubt have preferred simply doing away with these potential rivals. But this called for a level of resources beyond the reach of the dynasty, both administratively and militarily. As to the first, to simply destroy the Nadu and its institutions would have required its replacement by a Royal state apparatus, something which was beyond the capacity of the Cholas. What is more, to even consider such a course of action, the Cholas had to possess a level of military power which they simply did not possess. Hence, the dynasty turned to the second strategy, namely, an incorporation of the nattar into the state apparatus.

But the strategy was a failure. The Cholas did successfully establish a dominant presence in South India, particularly Southeast India, for a period stretching over a century;²⁷ the establishment of the Brahman villages would have been difficult without it. And in doing so, they also curbed the power of the powerful nattar lineages controlling the distribution of the agrarian surplus. Recognition of Chola suzerainty is evidenced in the many local inscriptions in which nattar invoke the authority of the Chola emperor for donative acts.²⁸ It is most directly visible, however, in the simple act of tribute, paid under the designation of 'taxes' by the nattar.²⁹ But while local lords did recognise the authority of the Cholas for a significant expanse of time, the second prong of the Chola strategy – gradual erosion of Nadu cohesion – never came to fruition. The state in this period never developed beyond what one historian has called a 'proto-bureaucratic' form; while the king had a large personal retinue and palace administration, this apparatus of rule scarcely stretched beyond the royal walls [Heitzman, 1985: 350; Heitzman, 1987a: 46–8]. Royal authority in the hinterland thus had to be represented by the nattar themselves, or by officials from the household staff.

Now, it should be stressed that so long as Chola power remained intact – and by this I mean military power – the reliance on lordly participation posed no intractable problems. Nattar power was still fragmented, dispersed into scores of Nadus more concerned with securing royal backing against other lineages than with confronting the Cholas themselves. But placing a check on nattar ambitions should not be confused with eroding the base of their power. Precisely because the Cholas had no alternative but to turn to local lords for the functioning of their state apparatus, they did not erode

Nadu integrity so much as attempt to utilise it for their own purposes. Naturally, this left the class organisation of the nattar intact; hence, as Chola power declined under the hammer-blows of neighbouring powers in the thirteenth century, nattar power began to reassert itself. And as the carapace of the Chola state fell away, South India came under the sway of the nattar, whose organisational nuclei now studded the political landscape.³⁰

III. THE RISE OF VIJAYANAGARA AND THE TRANSFORMATION OF THE MEDIEVAL REGIME

As the rule of the Cholas came to a close in the thirteenth century, the pitch and intensity of lordly conflict escalated. No longer held in check by the presence of an overweening power, powerful nattar hazarded more ambitious military campaigns in their sub-regions, driven, one imagines, by the prospect of establishing their own lineage as the new power; as a consequence, the overall level of military conflict increased in South India through the thirteenth and fourteenth centuries [*Champakalakshmi*, 1987: 101–3]. The intensification of warfare found its concomitant in a more relentless assault on peasant incomes as nattar and Nadu organisations strove to extract a greater surplus to finance their wars.³¹ In the short run, this no doubt presented the nattar with a windfall, as the struggling peasant communities found themselves with little but their own meager organisation to ward off lordly demands; but the long run effects of continual warfare and peasant unrest could only be disastrous. As the fourteenth century progressed, South India appeared set to descend into a catastrophic spiral of war-induced economic decline.

The decline was forestalled by the entrance of a new power on the South Indian political stage, this time from the dry tracts around the city of Vijayanagara. The consolidation of Vijayanagara rule was the most significant development of medieval South Indian history. Lasting roughly from AD 1350 to AD 1550, the empire was far greater in expanse than that of the Cholas, employed more effective military and political technology, and – most importantly for the purposes of this article – initiated the changes which catapulted South India from its medieval period to the early modern. Chief among these were the rapid extension of agriculture from the wet riverine tracts which had been the backbone of the Chola empire to the dry plains of the interior;³² an acceleration of commodity production, itself an outgrowth of the process of agricultural expansion; and most importantly, the demise of the vaunted Nadu as the mechanism for lordly class organisation. The rule of the Vijayanagara empire thus marks the key transitional phase in South Indian history.

Class Conflict and the Development of Commodity Production

While the rise of Vijayanagara power can be traced back to the middle of the fourteenth century, its consolidation in Southeast India – the heart of the Chola empire – was not complete until the turn of the fifteenth century [Karashima, 1992: 16]. The conflict within the lordly class in that region thus continued unabated for close to 150 years. The onset of the new order immediately decelerated the pace of lordly conflict. The Vijayanagara kings established a core of governors – known as *nayakas* – throughout the empire, whose military capacity was far greater than that of the *nattar*. By the middle of the fifteenth century, *nattar* obeisance to the new *nayaka* overlords was an established fact [Venkataramanayya, 1936; Karashima, 1992]. The duties of the *nayakas* extended beyond the mere policing of *nattar* locality rule; they were the closest representatives of Royal authority in the outlying regions of the empire, the founts of state authority and also the bearers of the fiscal functions of the state – collection of revenue and funding projects for economic expansion.

The arrival of the *nayakas* no doubt stabilised the South Indian political landscape. But soon after the establishment of Vijayanagara power in the Southeast, the region was rocked by a series of peasant and artisan revolts against lordly depredations [Karashima, 1992: Ch. 8; *Palat*, 1986]. These revolts, the information on which is desperately thin, are a signal event in the history of South India.³³ They are one of the few recorded instances in Indian history of organized action by the peasant and artisanal classes against lordly rule. The largest of the revolts took place in 1429, starting in Aduthurai and spreading into other districts as the year wore on; rumblings have been discovered by Karashima in earlier years, however, suggesting that a general drift toward increased resistance was underway from the early years of the fifteenth century [Karashima, 1992: 142–5, 151–3]. The immediate effectiveness of the revolts in forcing the local lords to their terms is difficult to assess, for there is scant information on revenue rates before and after the event. Ironically, it is easier to gauge the long-term effect, for the revolts of the Tamil peasantry were pivotal in pushing the Vijayanagara rulers to increase their revenues by means other than intensifying rental exactions: first, like the Cholas, from increasing the land under cultivation, and second, through the promotion of artisanal production [*Palat*, 1988: 225–52].³⁴ And these new mechanisms for increasing revenue in turn were instrumental, directly and indirectly, for a more general transformation of South Indian economic institutions.

The expansion of the agrarian frontier: The intensified resistance to rents in the Southeastern parts of the empire appears to have led to a more concerted

effort by the state to increase the area under cultivation on the one hand, and encourage artisanal and commodity production on the other. The extension of the arable was in many respects similar in its dynamics to that under the Chola empire. The central actors were once again the state, temples, and parts of the lordly stratum. But there was an important difference in this case: nayakas, and not nattar, were the central actors in this phase of agricultural expansion. The displacement of the nattar by nayakas in the inscriptions is symptomatic of the growing power of the latter during this period, as noted above. The process for bringing new land under cultivation was similar in certain key respects to that of the earlier era, as it involved a close co-operation with temples. But the mechanism driving this process was in certain respects different. Whereas the typical pattern in the Chola period was for nattar to donate parts of their own estate to the temple, the grants of land this time frequently came from the state itself.

The state made grants of uncultivated land to temples, expecting that the latter would take the necessary steps to bring it under the plough. Temples in turn leased this land to nayakas, or even nattar, at rates the latter found acceptable. The strategy was of obvious benefit to temples, as it immediately increased their income through the payments they received as rent.³⁵ It was also advantageous for the nayakas, in that the rates which they paid to temples were frequently lower than what they would have paid the state for the same land; moreover, once set, rental rates to temples were highly unlikely to be revised upward.³⁶ After securing possession of the land, nayakas could bring in new peasants from neighboring communities and launch the initiatives to increase cultivation. But not all newly settled land was leased from temples. Lands granted to temples by the state were mainly in the drier, less settled tracts; in the more fertile tracts, extension of the arable was taken up by the nayakas themselves. This was partly due to the simple fact that these areas were more firmly under nayaka control; it was also, however, symptomatic of a probable reluctance on the latter's part to initiate the expensive process of settlement in less fertile regions at anything other than the concessional rates garnered through the state-temple connection.³⁷

The encouragement of artisans: The second element in the strategy for increasing state revenue was the promotion of artisanal and commodity production. This primarily took the form of granting concessional rates of taxation to artisans, particularly weavers, in areas under nayaka control. Material incentives were also accompanied by the trappings of symbolic status, such as employment in positions of authority in temples [Shanmugam, 1989: 44; Palat, 1988: 227–8]. The sundry incentives to artisans were meant not only to encourage commodity production by

denizens of the empire, but also to attract such producers from neighboring regions. The strategy was successful in many respects. Artisanal production in the Vijayanagara period far exceeded anything witnessed in the years preceding its rise to power; what is more, this burst in activity was, as intended, partly fueled by the slow migration of new groups of producers into the bounds of the empire."

The qualitative increase in commodity production in the years of Vijayanagara was thus partly a direct outcome of state efforts. But the success of this policy was also parasitic in large measure on two, less direct consequences of Vijayanagara rule, namely, the new survival strategies of the peasantry, and the long-sought erosion of Nadu solidity. While the first of these laid the foundation for the increased production of commodities, the second rendered possible their circulation.

Emerging peasant strategies: The extension of agriculture into the interior tracts of South India not only increased the volume of agrarian surplus, it also affected the composition of the goods produced. This was partly, of course, the outcome of changing demand conditions, to which peasants were responsive; it was primarily driven, however, by the new strategies of peasant reproduction. Unlike the lush, fertile tracts of the deltaic regions, the lands confronting the peasantry as they pushed into the interior were dry, far less fertile, and hence far less reliable in their yield. These natural conditions only increased the risks accompanying agricultural investments. The social property relations governing production ensured that the response was, as in the deltaic tracts, to minimise risk rather than to maximise profit. Rice production was still possible in dry areas, if sufficient irrigation could be provided, but the staple crop in these tracts was millet, along with sturdy non-grain crops like pulses [Ludden, 1985: 56, 58; also Ludden, 1978, *passim*). Given the highly uncertain conditions, however, peasants were reluctant to commit to any one crop at a time; the most common strategy was therefore to grow paddy if at all possible, but to also plant other more sturdy crops as insurance against rain failure. This strategy took the form of intercropping, that is, growing several crops in a field simultaneously [Murton, 1970: Ch.6].³⁹ Thus, if the rains failed, the sturdier crops could survive while the others perished, and in the case of abundant rain the latter would flourish while the former did not. This naturally precluded the full use of scale economies, while also inhibiting the development of technologies specific to particular crops.

While pulses and millets were commonly used in peasant intercropping strategies, a crop that soon emerged as central in dry tracts was cotton. Cotton was especially resistant to the effects of rain failure, and, just as importantly, the demand for its cultivation was increasing through the

Vijayanagara period, both internally as the establishment of new temples continued apace, and externally as trade links with Malay and the Spice Islands opened new markets for Indian textiles.⁴⁰ Thus, in the dry tracts of the interior, cotton soon emerged as a pillar of peasant survival strategies. It is important to stress that its cultivation was not a simple response to an increase in its demand; if demand were the sole mechanism behind its cultivation, cotton producers would have been more receptive to the rise in cotton prices, switching to its cultivation exclusively. Indeed, there is evidence that the yields from intensive cotton cultivation when grown by itself were twice as high as when it was interspersed with grain. Despite this significant differential in yield and hence potential income, peasants continued to practice the intercropping of cotton with other crops, choosing the more secure outcome over the more lucrative one [Parthasarathi, 1992: 42–54, especially p.51].⁴¹ Experimentation with new techniques and investments was not entirely precluded, but it was practiced only so long as it did not encroach on the time-worn techniques known to minimise the risks of the environment. Nevertheless, despite this quite rational reluctance to devote themselves entirely to growing cotton, peasants of the interior greatly expanded its cultivation as they pushed further into the dry tracts of the South.

While the cultivation of cotton was one outcome of survival strategies in the less fertile tracts, its spinning and weaving were two others. Spinning, the intermediate stage between the cultivation of cotton and its manufacture into textiles, was taken up as a part-time occupation by poorer peasants in the long slack months in dry-land agriculture. Unlike the wet tracts, where the exigencies of paddy cultivation and irrigation maintenance filled the entire year, agriculture in the drier lands was characterised by a period of relative inactivity between January and July. In these months, peasants commonly took up spinning as an ancillary activity. The resort to spinning was especially pronounced in times of dearth and famine, which were of course far more recurrent in the interior than on the wet tracts [ibid.: 71–80]. As with spinning, peasants also frequently took up cloth weaving as a part-time occupation. The practice of part-time weaving has been the object of very little research, attention being mainly directed toward weaving as a full-time vocation. Weavers of the part-time variety seldom produced for international markets, their production confined basically to coarse cloth intended for local fairs and markets. Their visibility is therefore shrouded behind the cover of the village economy, still largely a mystery through the early modern period. Despite its less exalted status in the historiography, however, part-time weaving undoubtedly played an important role in the survival strategies of South Indian peasants [ibid.: 93–51].

The expansion of agriculture into the dry lands of the interior thus

generated new survival strategies by peasants, which had the further effect of increasing the volume of commodity production. But a crucial fact about this increase is that it was a creature of the same risk-aversion on the part of peasants as the Chola dynamic had been – it was not an outcome of transformed production relations. As we have seen, the new ecological conditions did nothing to change the relations which governed production, for these remained peasant-based, much as in the wet tracts. And like agriculture in the wet lands, cultivation in the dry regions remained oriented toward minimising risk. What changed was the *practices associated* with risk minimisation – the crops grown and the ancillary activities taken up. These included cotton and the manufacture of textiles, which not only provided peasants with insurance against the possibility of famine, but also had the effect of increasing the production of commodities in South India.

The fall of the Nadu: For the *circulation* of commodities to increase commensurately with the volume produced, it was not enough for peasants to simply rely on the wherewithal of the local merchant. So long as the exchange of commodities was confined to one nagaram per nadu, at prices fixed by local nattar, and by the few select merchants granted the Nadu's sanction, there remained narrow limits to the volume of exchange. In other words, so long as local and regional trade was subject to the political control of the lordly class, the circulation of commodities could not but remain limited in scope. Nattar control over local commerce had not been an obstacle so long as the demand for commodities was limited; but once it reached beyond the volume normally associated with local trade, becoming increasingly regional and even international in scope, its regulation by the local lords could only be a fetter on its expansion. If the goods produced were to be exchanged, the power of the nattar had to be broken – and this is precisely what the Vijayanagara kings moved to accomplish. The motivation for launching an assault on the Nadu issued primarily from the new military pressures on all South Asian polities, which will be discussed in more detail below. For now let us simply note that an accompaniment to these pressures was a stepped up need for state finances, which could only be increased through two mechanisms – either through the extraction of a greater volume of surplus from the producers in the form of taxes, or through the taxation of commerce. The former had been delivered a setback by the series of peasant revolts in the sixteenth century; finding ways of increasing the volume of trade therefore became a matter of some urgency for the Vijayanagara kings. And the principal obstacle to this end was the power of the Nadu over local and regional commerce.

The attack on the Nadu was conducted on two fronts, from above and from below. From above, nayakas fanned out into the countryside and

established principalities with strong military garrisons; the method here was direct – they simply out-muscled the nattar and established themselves as the local lordly power. In this respect the relations between the state and the nattar in the time of Vijayanagara stood in sharp contrast to the Chola period. Whereas the latter pounded vainly against the solid shell of the Nadu, and had to settle for the simple collection of a periodic tribute, the former used its far greater military capacity to sunder the nattar organisation in addition to collecting tribute. The practice of rewarding loyal officers by granting them power over newly conquered principalities was not new to Vijayanagara. It was brought into currency by the Kakatiya kingdom in the Andhra country in the twelfth and thirteenth centuries, as a means of attenuating royal dependence on old lineages.⁴² It is quite likely that, as the Vijayanagara kingdom had its capital squarely in the region once occupied by the Kakatiyas, this practice was inherited from the latter. Hence, as the Vijayanagara armies entered the regions further South, which had once been the centers of the Chola and Pandya kingdoms, the establishment of the new principalities developed apace, subordinating the old lordly lineages. Nayaka power first made its presence felt in the initial years of the fifteenth century in Southeast India, and by the final decades seems to have clearly overshadowed the authority of the Nadu in local and regional affairs [*Karashima*, 1992; *Palat*, 1988].

From below, the process was somewhat different. Unlike the rise of nayaka power, which was consciously initiated by the Vijayanagara kings to displace the nattar, this dynamic was more or less independent in its roots; the significance of the kings lay more in their inaction rather than in any direct intervention. Central to this process was the leap in the militarisation of South Asian polities in the years following the Ghorian invasions from in the thirteenth and fourteenth centuries. While the new rulers were based for the most part in the North, their arrival nonetheless transmitted a variety of new military techniques throughout the subcontinent, through the mechanism of warfare itself [*Baker*, 1984: 39]. As the advantages of the new techniques became clear – including the introduction of camels, better use of cavalry and firearms, and the use of platoons of bowmen – political aspirants throughout South Asia jumped to their use. The outcome was singular in its impact on South Indian history. First, every state throughout this period was pressured as never before to militarise itself, thus intensifying inter-state competition; the establishment of nayakas throughout the Vijayanagara empire was a symptom of this militarisation. But the transmission of military technique did not stop at the borders of states. It entered into the very fabric of class rule throughout South Asia, increasing the incidence of conflict within states as well.

In Vijayanagara the political space created by the erosion of Nadu

cohesiveness impelled scores of small military chieftains to make a bid for local hegemony. Many of these new aspirants for power were no doubt individual nattar pushing their domains beyond customary boundaries; but there were also military officers in the Vijayanagara army seeking to sink roots in the regional economies [ibid.: 48–56].⁴³ It is difficult to speculate on the likely consequences of this increased militarisation if Nadu power had remained intact. In a context where it was already waning under the blows of the Nayakas, however, it is scarcely surprising that the new potentates – known as poligars – effectively subordinated the nattar in many localities in South India. The significance of the Vijayanagara kings in this process was thus twofold: first, their sponsorship of nayaka encroachment was instrumental in rendering the Nadu vulnerable to attack; second, their willingness to let the poligars establish power at the local level deprived the nattar of the only power that could have shored up their rule, namely, the kings themselves. As the nayakas subordinated the nattar from above, the poligars gradually established themselves as a counterweight to the nattar from below.⁴⁴

The combination of poligar muscle from below and nayaka encroachment from above was enough to break the self-organisation of the nattar. It did not throw individual nattar out of their position as local lords; they still enjoyed considerable power individually within the countryside. But it did make a decisive breach in the institution around which they cohered, that is, the Nadu. Just how this dynamic eventuated in the dissolution of the Nadu on the one hand, while preserving the lordly prerogatives of many nattar on the other, still remains opaque. It could be that the displacement of many nattar families in particular localities, and the entry of new lineages, was enough to explode the time-worn unity of the class, as agnatic and kin-based ties had played a central role in the coherence of the Nadu; it could also be that the accelerating drive for revenue by the Vijayanagara state, backed by a new military prowess, drove many of the less responsive nattar lineages to ruin.⁴⁵ Whatever the mechanism may have been, it is clear that by the end of the Vijayanagara period, that is, by the seventeenth century, the Nadu had lost its importance as a *political* entity, and was important hereafter more for its social functions (for example, its importance for marriage circles).⁴⁶

Thus, as South India progressed through the rule of the Vijayanagara empire, the institutions which had governed its development throughout the medieval period witnessed a profound transformation. Chief among these, of course, was the Nadu. But with the eclipse of its authority, the economic landscape too began to assume a new, more variegated form. Economic centers began to shift from the Nadu-dominated nagarams to the forts and garrisons of the Nayaka overlords, as the nattar could no longer exert a

stranglehold over regional trade. This turn away from the nagaram in turn boosted the development of these forts into new urban centers, catering to the consumption needs of the new entrants into the lordly order; for producers, this new spurt in urbanisation meant an opportunity to turn away from the dependence on temples and local gentry for income, and a gravitation toward the new centres [*Palat*, 1988: 254, 260]. None of this issued in an absolute decline in the fortunes of temples, nor in their place in the regional economy. But it did mean that, relative to the newly emergent urban and military centers, the temples now began to recede in importance, as did the marketing centers of the nagaram. And as the new centers of consumption grew through the course of the sixteenth and seventeenth centuries, the South Indian artisanal economy experienced a new round of growth, riding the crest of the increasing demand for items of consumption and luxury [Ramaswamy, 1985a: 419,424; Ramaswamy, 1985b: 302]. The significance of this deepening commodity production, and the limits to its development, is addressed in the section that follows.

As the Vijayanagara empire began to fade under the combined impact of attacks from without and powerful centrifugal forces from within, the political economy of the region hitherto under its domain stood in sharp contrast to what it had been prior to Vijayanagara rule. Agriculture had expanded from paddy cultivation in the lands surrounding the river deltas to the surrounding drier plains of the interior, a process which not only generated new crops and irrigation technologies, but also had the effect of increasing the production of commodities. This increase in commodity production could not have been sustained, however, without an accompanying increase in their circulation; and this in turn could not be imagined so long as the Nadu restricted the volume of local trade through its regulatory mechanisms. Driven by the need for increased revenue, and unable (or unwilling) to intensify the extraction of a surplus directly from a restless peasantry, the Vijayanagara rulers launched a direct offensive against the Nadu. As the empire entered its later years, the powerful nattar lineages found themselves subordinated to the Nayaka governors and the newly emerging poligars. The success of this strategy not only lubricated the circulation of commodities, it also served to extend the latter, as new urban centers provided a boost to the internal demand for items of consumption.

IV. NAYAKA RULE AND THE EARLY MODERN DYNAMISM

As South India entered the seventeenth century, with Vijayanagara rule rapidly receding to largely symbolic status, the political geography of the region was marked by a few large kingdoms ruled by breakaway Nayakas

on the one hand, and scores of tiny principalities under the sway of the poligars on the other. In a sense, this was reminiscent of the immediate post-Chola years – the carapace of a large state falling away, leaving the region dotted by numerous little domains. But there was a crucial difference – with the demise of the Nadu, which had been the primary locus of lordly coordination, the old mechanisms of surplus extraction were now either no longer available, or had fallen into desuetude.

The shift in economic centres of gravity was an immediate outcome of the successful breach of Nadu integrity. The erosion of the latter also, however, laid the conditions for deeper, more long-term consequences. Throughout the medieval period, the Nadu had been the principal mechanism for lordly class cohesion. This was not only instrumental in the political regulation of trade, it was also central to the control of labour – the peasantry and various strata ensnared in servitude – and the attenuation of lordly competition over this labour. In the riverine tracts this need for labour control flowed directly from the labour-intensive nature of paddy cultivation and the necessity of constant upkeep of irrigation facilities; in the drier tracts, where paddy cultivation was less important and there were long slack periods between harvests, some regulatory mechanism was needed to mobilise labour for military engagements, much more common in the dry tracts than in the wet.⁴⁷ The availability of this mechanism thus mitigated lordly competition over labour within nadus; conflict among South Indian lords was therefore typically *between* nadu regions, with the Nadu organisation serving as a means of regulating nattar relations *within* each region.⁴⁸

The fissures in Nadu coherence thus bore the potential of not only wresting commercial control away from the nattar, but also of unhinging the traditional mechanism of lordly class organisation, and thereby loosening the control over peasants and rural labourers. This loosened control, it should be noted, did not simply imply a greater physical mobility of the peasant, it also carried the likelihood of a diminution in rental demands. We have already seen that the collection of rent had always been the responsibility of the Nadu; the decline in the integrity of the latter also meant, therefore, a commensurate erosion in the apparatus of surplus extraction, thus driving rental demands down and wages up. And this downward movement in rent would be only be further accelerated by labour's new-found physical mobility, as peasants and labourers would be able to capitalise on the lordly competition over their services.

So long as the apparatus of empire remained intact in the Vijayanagara period, these more fundamental changes could be successfully resisted. Despite the disintegration of lordly cohesion within the nadu region, the nattar were able to forestall the spiral into intensified competition over

labour and surplus as long as the Vijayanagara state was available to provide muscle on the one hand and – more importantly – discipline on the other. What this meant was that the rapid erosion of the Nadu organisation was offset by the state's incorporation of its functions into its own fold. What is more, individual nattar had a powerful incentive to turn toward the state as they found their traditional mechanisms for local control seriously compromised. In this manner the attack on the Nadu by the Vijayanagara emperors not only gave the latter entree into the local economy, it also generated a material dependence of the very targets of the attack – the nattar – on the state itself. What began as a confrontation thus ended as a *modus vivendi*, as the nattars' class position was preserved in exchange for a relinquishment of their local autonomy. But once the sinews of the empire began to weaken, and as the ability of the state to discipline the nattar began to fade, the conditions for stable lordly rule grew correspondingly weak. Peasant mobility began to increase, as did their ability to resist rental demands; as the subordinate classes' ability to resist grew, individual nattar had little choice but to bid against each other for the former's services, driving down rental rates and pushing up peasant and paraiyar income [Baker, 1984: 45, 53, and especially 87–81].

This new-found bargaining power for the labouring classes was what distinguished the Nayaka period most sharply from the interregnum separating the Chola and Vijayanagara empires. And this difference was pressed into relief ever more sharply by the rapidly accelerating need for revenue on the part of every ruler, which drove the various political units to hunt for new methods of lubricating state finance. One such method, carried over from the later Vijayanagara years, was the increasing reliance on customs and various other taxes on trade; another, more recent innovation was the turn to revenue farming as a means of collecting the agrarian surplus.⁴⁹ We have already examined the conditions centrally responsible for the greater power of the labouring classes; it remains now to explain how the increased need for revenue and the rise of revenue farming interacted with the former set of conditions. In particular, it is important to examine why revenue farming did not turn into a mechanism for increased exactions on the peasantry.

Of late, several historians have pointed to the evidence for rising prosperity in the Nayaka period [most notably, Rao *et al.*, 1992; Subrahmanyam, 1990a; Subrahmanyam, 1990b; Parthasarathi, 1992; Washbrook, 1993]. This contrasts sharply with the traditional historiography, which painted a picture of spiraling warfare, increasing immiseration, and unchecked oppression by numerous petty kingdoms. The empirical difference is accentuated by new theoretical claims as well, for the discovery of widespread use of revenue farming has called for an

explanation for why this practice did not drive the producers into misery. The traditional conception of revenue farming had a simple and compelling explanation for why it was generally incompatible with rising peasant incomes: as revenue farmers typically contracted to deliver revenues for a fixed duration, and as they frequently had only the most tenuous links to local society, they had a strong incentive to bleed the producers dry for the duration of the contract, and then look elsewhere for a new opportunity. The argument for rising peasant and labourer incomes is therefore burdened with the task of explaining why the seventeenth and eighteenth centuries did not witness the expected process of degeneration.

One explanation, developed most recently by David Washbrook [1993], holds that the South Indian peasant was able to escape this misfortune because of the rapidly accelerating competition between the regional polities; as kingdoms competed with each other militarily, they had no choice but to bid up the returns for labour in order to attract new labour and ensure a smoothly functioning economy. This argument is partly correct: it is true that the intensified political competition played to the advantage of labour. But political competition *itself* cannot be regarded as sufficient for increasing the bargaining position of labour in a pre-capitalist economy. Such competition can in fact be the occasion for intensifying the rental obligations of the producers, as lords and states scramble to increase the flow of revenues into their war-making apparatuses. Competition between pre-capitalist states is thus just as likely to generate increased immiseration for the producers, for rulers typically have the option of increasing revenue by further squeezing peasant incomes. What is more, this is generally a more rational method for increasing state liquidity, since the mechanisms of surplus extraction are already established, while new methods of collecting the surplus require new structures, new personnel, take time to learn and so on. Hence, to simply point to increased competition between political units hardly suffices as an explanation for the rising incomes of labouring groups. It is also necessary to explain why competition yielded *this* outcome instead of its opposite.

A more plausible answer can be proffered on the basis of the arguments mobilised in this article. Increased competition between political units failed to drive down the incomes of labour because it *could not*. The traditional mechanism of surplus extraction – the Nadu organisation – was by now in disarray, and the compensating presence of the powerful Vijayanagara state was a thing of the past. Rulers therefore lacked the means of enforcing higher rental demands or lower wages, as the traditional means of labour control were so heavily compromised. Indeed, the turn to revenue farming is itself symptomatic of the obsolescence of these older mechanisms of revenue collection. The escalating fiscal needs of newly

emerging states had clearly outstripped the capacity of existing extractive mechanisms, a state of affairs which called for the entrance of a new conduit between the units of production and the upper reaches of the state. But the entrance of revenue farmers, while injecting a modicum of competitiveness among the revenue appropriating class, did not alter the fact that peasant and labourer mobility had received a massive boost. Whether the revenue farmer was a new actor in the locality, or whether he was a nattar hiring out his services to the state, he still lacked the means for imposing discipline in the old fashion.⁵⁰ New entrants typically had to rely on enlisting established nattar for revenue collection, as the former frequently possessed inadequate knowledge of the area; on the other hand, older nattar stepping forward as revenue farmers simply faced the same problem as their peers in imposing labour control. The end result was the same: revenue farmers and nattar were both pushed to attract labour to their localities by bidding up the returns for their services.⁵¹

None of this denies the importance of inter-state competition in the wake of Vijayanagara rule. It merely adds that this competition could not itself generate the consequences now being stressed in the new historiography. Rulers are separated from producers by layers of intermediaries; when the orders for increased revenues are issued, the decision as to how this increase will be garnered typically rests with the lower rungs of the ruling class, as that is the stratum which actually appropriates the agrarian surplus. I have argued that this increase can be secured through more than one route, depending on the existing means at the disposal of the lordly class, and the resulting balance of forces in agrarian society. Lords may either secure greater revenues through squeezing producers, or through competing among themselves for their services. Which route is actually taken cannot therefore be 'read off' a simple order to increase revenue. Instead, it requires an examination of dynamics closer to the units of production and appropriation. What made the increased competition among states translate into increased income for the producers was the series of transformations in the locality, not the need for more revenue *per se*.

Was it Capitalist? I have argued that the later years of the Vijayanagara empire and the century that followed its demise were distinguished by a marked increase in commodity production on the one hand and in the incomes of labour – peasant, artisanal, and rural – on the other. These phenomena were driven by two distinct mechanisms: first, the expansion of agriculture into the drier tracts of the plains, and second, the disintegration of the Nadu organisation. Could the South Indian economic system under this new dispensation be characterised as a form of nascent capitalism? Let us first examine the nature of the mechanisms behind the increase in

commodity production. There is little doubt that the Vijayanagara period initiated a series of changes that not only brought about a quantitative increase in the commodities being produced, but actually served to deepen the existing division of labour. The expansion of textile production is just the most well-known aspect of this new economic vigor; not only did the demand for Indian textiles increase through this period, but it also pressed the component parts of the industry into a further specialisation: cotton cleaning, twisting, carding, and winding were becoming the provenance of distinct actors, who were not only moving toward a specialisation in these activities, but also apparently purchasing the bulk of their inputs on the market [Ramaswamy, 1985b: 308–9]. Also experiencing a similar increase in the demand for their products were metal workers, masons, and carpenters.⁵²

While these developments were certainly of some significance, they should not be taken as evidence for a newly emerging capitalist order. The increased commercialisation certainly brought more producers into the circuits of exchange, while it also increased the ambit within which merchant groups functioned. But there is little evidence for the emergence of capitalist forms of production in this process. Merchants do seem to have had some leverage over producers, primarily through the mechanism of extending advances for goods ordered; but they did not yet have control over the process of production itself, which remained under the control of the producers.⁵³ Furthermore, the dynamic of differentiation and economic mobility within the ranks of artisans was itself limited. In the textile industry, which is the only one for which we have reliable evidence, individual weavers retained control over their labour despite a measure of inequality among them;⁵⁴ nor does it seem that the move from weaver to the status of merchant was very common [Parthasarathi, 1992: 110]. Hence, not only did weaving remain artisanal in character, but the production and circulation of textiles continued to be the provenance of distinct actors. Now, it may be argued that the reliance of artisans on the system of monetary advances was the first step in an ineluctable dynamic of proletarianisation. But this is unwarranted, for two reasons. First, merchants have exhibited no uniform tendency to press for a complete control over the labour process, once they have attracted artisans into the circuit of monetary exchange. A deepening of gains from usury and commercial speculation is no less likely than a push for proletarianisation. The likelihood of the latter over the former rides on a number of factors. One of the most important of these is the vitality of existing markets, which brings us to the second reason that the assumption of growing proletarianisation is suspect: while markets certainly were growing relative to past periods, the scope for further growth was limited.

The rising demand for artisanal work primarily issued from the continued placement of temples in the countryside, and from the new elites emerging under the protection of the Vijayanagara rulers.⁵⁵ This naturally placed limits on how far the development of these sectors could proceed; as argued above, temples could not be the source of an internally driven process of growth. Similarly, elite consumption was not only limited, but the nature of their demand also did little for the regional economy. There is little doubt that a large component of the new demand was for the military needs of this class, and since the implements of war rarely re-entered the economy (except perhaps as scrap), the bulk of elite consumption had few cumulatively beneficial effects. Hence, not only was the existing regime of production still pre-capitalist, the factors importing a degree of dynamism into its functioning were strictly limited in their potential. This suggests that the difference between the growth experienced under the Cholas and the Vijayanagara rulers was one of degree, not of kind. In both cases, increases in artisanal production were propelled by elite consumption – whether based in temples or in garrisons – and therefore incapable of generating an endogenously driven growth trajectory. The latter would have required a market that was not only more extensive, but also constantly growing, and this could not emerge so long as the bulk of the population – the peasantry – oriented itself away from the market.⁵⁶

A market-led path to capitalist development was hence not in the offing. This leaves the second mechanism behind the growth of commodity production in the early modern period, namely, the peasant producers in the drier tracts. With all the attention poured onto the South Indian artisans of early modern era, it is at times easy to forget that the vast majority of the population continued to eke out a living against the demands of nature and local lords. Any transformation of the regional economic regime was parasitic on a prior or concurrent change in this sector. We have already observed that the extension of agriculture into the dry tracts of the plains induced a greater commercialisation of agriculture; could this have continued to an endpoint of capitalist production? To answer this question, the relation between the expansion of agriculture and the deepening commercialisation must be borne in mind. Recall that the latter process was not the outcome of a switch from subsistence to commercial farming; it was a component of the peasants' subsistence strategies themselves. The cultivation of cotton was resorted to in the plains as a means of insulating peasant incomes from the uncertainties of monsoons and lordly demands. It was rarely taken up to the exclusion of other crops, despite the fact that it offered much higher yields than grain. The most common form of cultivation, as noted earlier, was intercropping cotton with crops intended for subsistence. The growth of commercial cultivation was thus a by-

product of peasants' subsistence strategies. The amount of the agricultural surplus marketed therefore continued to grow, but only because the land under cultivation continued to expand. It was not an index of a turn from subsistence to commercial or capitalist agriculture.

The available evidence thus does not support the proposition that South India was in the midst of a capitalist transformation. There was certainly a great deal of monetary circulation, and several sectors were experiencing a deepening division of labour. It appears, however, that this commercialisation was occurring within the interstices of the old property regime. The bulk of production continued to be carried out by peasants with customary rights to the land, under the weight of rental payments to the weakened, but still ubiquitous nattar. The prospects of a genuine change in production, of a sort that would yield an 'Indian miracle' paralleling that of Europe, hinged on the transformation of this agrarian regime, and there is no evidence to the effect that such a transformation was in process. Hence, while it is legitimate to claim that British rule established an economic order which trapped the vast majority of South Asian labour in highly exploitive social relations, it is far from credible to assert that it derailed a nascent transition to capitalism.

V. CONCLUSION

Analyses of Asian development over the long haul have understandably been conducted with the experience of Europe as a backdrop. It may therefore be of some use to contrast the South Indian case more explicitly with Europe at this point. The 'miracle' which propelled Northwest Europe into modernity was the rather mundane fact of the transformation of its property relations into capitalist ones. For most of the modern period, moreover, this development was confined to this small part of the European theatre. The rest of it was to continue in the cycle of economic growth and demographic crashes for the better part of two centuries.⁵⁷ I have suggested that while India did not experience a transformation comparable to that in England, it did none the less exhibit sustained growth through the medieval and early modern periods. This growth was primarily extensive in nature, a fact that was the outcome of the existing property relations; furthermore, the tempo of this growth was closely governed by the degree of unity which obtained within the lordly class. The accelerated rate of growth which apparently characterised the early modern period was, I suggest, an artifact of the increased competition within the class after the demise of the Nadu organisation. With the absence of a state to compensate for this institution, lords turned to bidding against each other for peasants and labourers in order to mobilise the revenue required in conditions of heightened warfare.

Now, in this respect South India falls between the paradigmatic cases of European feudalism, England and France. As in France, peasants were able to win secure property rights at an early stage of agrarian development; unlike France, however, South India was able to escape the infernal cycle of demographic collapse and economic growth so typical of feudal societies – in this it was more like early modern England. What should be noted is the distinctiveness of the mechanisms in the two cases: in England it was the transformed property relations which allowed economic growth to proceed apace demographic growth, so that the ceiling on the latter imposed by the feudal economy could be avoided, while in South India it appears to be the availability of arable into the nineteenth century that was crucial.

The fact that the transition pointed to in this article occurred within a pre-capitalist property regime, rather than from one such regime to a capitalist one, also makes the case somewhat more enigmatic. In essence, my argument points to the possibility of developing analyses of differential rates of development across pre-capitalist societies. I have suggested that even though inter-class relations remained unchanged throughout the millennium under study, the change in intra-class relations – particularly within the lordly class – crucially affected the complexion of the former. While the inter-class relations established the basic conditions for the extraction of surplus from the producers, the intra-class relations governed the realisation of this surplus. Medieval and early modern South India can thus be regarded as two different cases of pre-modern agrarian societies: one with a cohesive lordly class, and one without. While the first allowed for economic growth within certain limits, it required a change in lordly relations for this growth to continue through the early modern period. The state of Indian historiography still makes this a somewhat less than certain conclusion – we do not possess anything like the quantitative data in other parts of Asia, much less Europe. Nevertheless, it does, I believe, present an argument that is the most consistent with the facts as we know them.

NOTES

1. The terms 'medieval' and 'early modern' are not always used consistently in Indian historiography. Since this article focuses on South India, particularly South-eastern India, I should clarify my use of these terms in the context of that region. In using 'medieval', I refer to the period stretching from the rise of the Cholas – the ninth century – to the Vijayanagara Empire – the fifteenth century. By 'early Modern' I refer to the period stretching from the later years of the Vijayanagara Empire – the sixteenth century – to the eighteenth century.
2. For the institutional factors, see Jones [1987]; for the effects of religion, see Hall [1985]. Michael Mann [1986] has also pointed to the importance of Christianity for the precocious development of the European economy, but it is less the ideological than the institutional effects that he emphasises.
3. In the historiography of India itself, this line of argument found its sharpest expression in

- Moreland 1929. Although challenging some of its elements, echoes of this position remain in the work of Irfan Habib [1963], and the Aligarh School, which is summed up in Kumar and Raychaudhuri [1982].
4. The modest size of their holdings should not, however, be taken to suggest meagre resources; It should be recalled that in the wet riverine tracts, multicropping made a unit of land far more productive than its counterpart in Europe.
 5. See Heitzman [1985: 156–7]. For information on the cottars of medieval England, a convenient source is Lis and Soly [1979].
 6. This condition survived into the modern period, the details of which are provided in Kumar [1965]. Note that the curtailment of physical liberty also resonates with the condition of cottars, who were typically not allowed to leave the manor for work elsewhere [Kosminsky, 1956: 300–3021].
 7. For the different regimes of labour-demand, see Baker [1984: 139–40]; and Alayev [1982: 229].
 8. While the extra-local effects of canal management have long been recognised in the literature, Ludden has perceptively noted similar dynamics in the case of tank irrigation as well [Ludden, 1985: 63–6, 88–89; also Gurukkal, 1989: 162].
 9. The path-breaking work on the rise and structure of the nadus is Subbarayalu [1973]. See also Karashima [1984] and Veluthat [1993: Ch. 6].
 10. Subbarayalu found that the area of a nadu region was typically between 15 and 30 square miles, the average being about 25 [Subbarayalu, 1973: 21–2; also Subbarayalu, 1982: 273; Subbarayalu, 1983: 175].
 11. This process for a particular region within South India is explained in Dirks [1987: 144–54]. For the suggestion that chiefly lineages emerged from this dynamic within nadus, see Subbarayalu [1973: 96–7].
 12. The logic of my argument suggests that the orientation toward the market should have been positively related to peasant income. In other words, wealthier peasants should have been more inclined to enter into market transactions than poorer ones. Evidence from the eighteenth and nineteenth centuries supports this hypothesis. Burton Stein [1989a: 82] has found that in the eighteenth century, almost all nutritional requirements, and almost half of the clothes, of the poorer cultivators and agricultural labourers were met either through barter or self-production. Wealthier peasants went to markets four times as much as poorer ones, who in turn were twice as likely to engage in market transactions as a cultural labourers.
 13. Villages in which Brahmans were granted rights over the land were known as Brahmadeyas. The literature often refers to these as 'Brahman villages', suggesting an exclusively Brahman population, but in fact most Brahmadeyas were comprised of mainly non-Brahman castes. Brahmans simply had a monopoly over the superior land rights.
 14. A further advantage for the lord lay in the fact that, since he was the local power, initial agreements with temples could often be re-negotiated in the future, to his advantage. This stood in contrast to the lord's relation to the distant and more powerful Chola kings, even though the latter granted them considerable autonomy. For this element in lordly incentives, see Heitzman [1987b: 814–16] and Palat [1988: 247–8].
 15. It is somewhat puzzling why a new plot of land would not be taxed by the state. As sovereign, the Chola emperor, in theory, claimed a right to a portion of the surplus from all land. Hence, unless explicitly stated otherwise, as in cases such as the one discussed above, all land was subject to taxation. Since the land being brought under cultivation was new, why would the nattar not pay tax on it? On the other hand, if they were to pay tax on it, they would have no incentive to bring it under the plough, since they would now have an obligation to the temple, one new one to the state, as well as the initial sum deposited with the state to cover the donated land. The answer must be that the land donated to the temples was on the outskirts of villages, containing some that was already cultivated, and some that lay waste. The temple would continue to get the product of the cultivated land, while the lord would appropriate the product issuing from the waste land as it was turned into arable. Since the land now had an owner (the temple), the parts of it that were newly cultivated were not, technically, new land. Hence they would not be subject to taxation as new land. This is suggested, albeit obliquely, by Palat [1988: 247–8] and Heitzman [1987b: 814–16].

16. Meera Abraham [1988: 74] reports that by the 13th century one commercial unit comprised more than four modern districts in Tamil Nadu; similar zones of commercial transactions were to be found in medieval Karnataka as well. This suggests that it was not uncommon for several nadus to be linked economically.
17. See also Champakalakshmi [1986: 45], where she argues that nagarams were novel to the Chola era.
18. I have not been able to establish the use to which these deposits were put by the nagaram administrators. Hall, in the most detailed available study of the nagaram, informs us that the latter frequently held rights to plots in the immediate environs [Hall, 1980: 58–91]. It is possible that temple funds were being funneled into the expansion of agriculture, much the same as in the case with Brahrnadeyas. The purchase of rights over land raises the question of the nagarams' relation to the local Nadu administration, for it seems unlikely that, in an agrarian order marked by a well-established lordly class, newcomers could enter into their ranks with impunity. I address this matter in the next section.
19. Direct reference to this demand-side effect of nagarams is hard to find in the secondary literature on the Chola period. The claims I make therefore rely on two inferences: first, the fact that nagaram were residential and production sites must have required a mechanism for an adequate provision of foodstuffs and material inputs for production. This simply follows from the fact of their settlement. Second, there is evidence for this sort of demand-side effect from a later period, namely, that of the Vijayanagara Empire two hundred years later. Now, there is no doubt that evidence from the later centuries does not provide proof for claims pertaining to the Chola era. But in so far as the internal composition of nagarams or other such 'rurban' sites was similar in the two periods, it is plausible to assume that the kind of effect they exercised on internal trade must have been the same; the difference would have been in its magnitude. For nagarams as residential and administrative sites, see Hall [1980: Ch. 3].
20. For artisanal specialisation in the Chola period, see Hall [1980: 110–15]. On the specialisation in merchant activity, see Champakalakshmi [1987: 84].
21. Unfortunately, the more common occurrence is for the question not to even be broached. With the notable exception of Burton Stein, few historians have offered an analysis of South Indian development through the entire medieval and early modern periods. Most rarely venture beyond the immediate bounds of their specialisation.
22. Until recently it was common for historians to assume that the first strategy was the more common one. The work of R. Tirumalai has been important in correcting this impression [Tirumalai, 1987: 5]; see also Appadorai [1936: 297] and Granda [1984: 135–8]. Note that while in theory it was land that was being transferred to the temple by donors, the common stipulation that the donor's customary rights over it be retained made it, in practice, a donation of the produce from the land.
23. This could have one of two effects: either the state would now store the money in its own coffers, so that the net result would be that it would remain out of circulation; or, more likely, the state would expend the money either as donations to another temple or on warfare. In this case the money could generate additional income, as the temple in turn lent it out to expand cultivation. If it went into war, however, its effects would be more indeterminate, depending on who received it.
24. What made this rational for the nattar has been explained above: while the delivery of the capitalized sum to the state did decrease their income in the short run, the temples' loans back to the nattar allowed the cultivation of new land, and through that an increase in income in the middle to long run.
25. This is one of the most significant findings of Kenneth Hall [Hall, 1980: 124], and has been confirmed by R. Champakalakshmi [1986: 46], although she has found evidence for more than one nagaram in a small number of nadus. See also Abraham [1988: 121–2].
26. Although the regulated character of trade within the nagaram is well known, few historians seem to have appreciated its significance. Hall hints at the interests involved [Hall, 1980: 128].
27. In one of the most careful studies of the Chola state, Heitzman [1987a: 54] dates the high period of Chola dominance over the nattar as stretching from AD 1000 to AD 1150.

28. The two most careful studies of the Chola state are Subbarayalu [1982] and Heitzman [1987a].
29. See Shanmugam [1987, *passim*]. Individual Nadus were responsible for the collection and payment of taxes in their locality. In the heyday of Chola power they thus doubled as fiscal units. For Nadu responsibility for tax collection see Subbarayalu [1973: 38-40] and Veluthat [1993: 186].
30. 'The Chola kings and their officials extinguished the primacy of local assemblies when they consolidated power in the south, but as the Chola kings and their administrative organs retreated the local assemblies bounced back to establish their own local dominance', [Heitzman, 1987a: 53]. And again, 'After 1150, the political forms typical of local ecology and economy reemerged as significant arbiters of revenue allocation and political power' [ibid.: 54].
31. Subbarayalu [1982: 228; and 1984: 175] has argued that the attack on peasant incomes had in fact begun in the waning years of Chola power, that is the twelfth and thirteenth centuries.
32. The extension of agriculture into the dry interior lands had in fact begun in the Chola period, but it was under Vijayanagara rule that the process came into full force, with all its attendant effects. I have therefore relegated its discussion to this section of the essay.
33. It is tempting to attribute the revolts to the intensified exploitation of the past 150 years, but this would be unconvincing. Revolts are conjunctural events, and a mechanism which was present for almost 200 years can hardly suffice as a complete explanation. This said, the likelihood that the onerous level of exploitation was a contributing factor should not be underestimated. Palat has pointed out that the revolts were concentrated in the deltaic tracts of the Southeast, which were some of the oldest settlements in the region; the peasantry of these tracts probably had stronger ties and more stable organisational forms on which it could draw. See Palat [1988: 215]. To this I should add another structural factor. Several historians have noted that population pressure had begun to be noticed in the riverine tracts by the 13th century; there is evidence for peasants taking up cultivation on poorer lands, which suggests that the more fertile areas were fully under the plough. Now, as long as land was available relatively easily, peasants could react to increased rental rates through flight, especially in circumstances of heightened lordly competition. But as land became more scarce, it is likely that the instinct to migrate was curbed by the difficulty of finding new land. This in turn must have increased the resolve towards collective action against lordly oppression. To my knowledge no historian has explored the possibility of this connection. For evidence on the increasing man:land ratio in the riverine tracts, the work of Tirumalai is indispensable: see Tirumalai [1987: 7-9, 33, 35-6, 99]. See also Ludden [1985: 23]; Subbarayalu [1973: 21].
34. My understanding of the connection between intensified class conflict and the state's turn to new avenues for revenue is heavily indebted to Palat.
35. The lands made over to temples were not exempt from taxes, however. All land under cultivation, whether held by temples or by lords, was subject to taxation, unless explicitly exempted. Of course, concessional rates were always possible. See Granda [1984: 135-8].
36. For land grants made by the state to temples, see Palat [1988: 147, 150]. Palat has found that grants by the state were made more frequently in dry areas not yet fully settled. Hence grants in these areas are not only of state origin, but also less specific in their enumeration of privileges accompanying the land: such privileges and rights simply had not developed in these tracts, for property itself had not fully developed. For evidence on nayakas as the main lessors of temple land, see [ibid.: 159-60]; on rental rates to temples being lower than to the state, see [ibid.: 246-48].
37. For nayaka efforts in the more fertile tracts see Palat [1988: 251].
38. On the increase in artisanal production, see Ramaswamy [1985a]; Ramaswamy [1985b]; Shanmugam [1989]; Sinopoli [1988]. On the migration of artisans into the empire, see Palat [1988: 233, 235].
39. Murton's dissertation is mainly based on eighteenth century sources. Most of the practices common to the eighteenth century were, however, established by the sixteenth century [Ludden, 1985: 56].
40. For the markets in the East Indies, see Ramaswamy [1979: 124-5]; for increasing internal demand see Ramaswamy [1985a: 419, 424].

41. I am grateful to Dr Parthasarathi for allowing me access to his important work.
42. This dynamic in the Kakatiya kingdom has been carefully analysed by Cynthia Talbot [1994], who explicitly suggests it as a precursor to the Vijayanagara-era Nayakas.
43. Dirks [1987] is the fullest account of the development of one such principality.
44. Stein [1989a: 85] explicitly recognises the instrumentality of the poligars for Vijayanagara rule. Note that this utility of the poligars not only lay in their displacement of the Nadu, but also in the fact that their small size made them far more dependent than the nattar had been in the heyday of the Nadu.
45. Ironically, despite its greater proximity in time, the post-Vijayanagara era in South Indian history is far less familiar to us than the era preceding it. It is difficult, therefore, to be as confident in our pronouncements as to its distinctive elements. Nevertheless, the few serious economic histories which are available do point in the direction taken by this essay. For evidence on the factors adduced in the text being important in the break-up of Nadu cohesion, see Mizushima [1985: 155–8, 174–5, 187, 188]. Mizushima concludes that 'the entity of the locality ... had been cut to pieces by the period under study. Landed rights were often transferred to outsiders irrespective of the internal caste structure in the locality' [1985: 187]. See also Baker [1984: 87–81 for an argument suggesting that the greater mobility afforded to military adventurers in this period also played an important role in dissolving Nadu integrity.
46. For more general arguments on the break-up of the Nadu, see Dirks [1987: 33–35, 36]; Murton [1975: 161, 1621; Stein [1969: 191–2, 211]; Palat [1988: 221, 223, 258, 260]. See especially Karashima [1992: 33, 61, 63 [n. 30], 122]. Stein [1985: 397], concludes that the demise of Nadu cohesiveness 'reduced [it] to a marriage, kinship, and cult territory'.
47. Baker [1984: 49] notes that wars in South India tended to take place on the dry plains, leaving the riverine tracts untouched. This is echoed in Ludden [1985: 29]. In these more militarised areas, agnatic and clan-based ties, cemented in the Nadu, were crucial for the mobilisation of labour for war.
48. Baker [1984: 183–4] shows that even into the twentieth century, peasant and paraiyar mobility was strenuously resisted by village lords. Now, if this was the case in the twentieth century, when the Nadu was in complete disrepair, there is surely reason to imagine similar resistance to peasant mobility in earlier centuries. See Dirks [1987: 216–17], who notes that most peasant families tended to move between villages, with movement between nadus being far more rare.
49. Though Saletore [1934] has argued that evidence for revenue farming can also be found for the later Vijayanagara period. Peter Granda [1984: 379–80] also adduces evidence to the same effect, though he is not directly concerned with the issue.
50. That the revenue farmers were sometimes drawn from nattar ranks is argued by Mizushima [1985: 129–30]. See also Rao *et al.* [1992: 100–104]. This should not come as a surprise, given the argument developed in this essay. As older lineages fell further behind in their ability to draw the requisite amount of surplus from the producers, and as the actors occupying lordly positions in the regions began to turn over at a higher frequency with the increased warfare, we should not be surprised that among the new actors offering to collect revenue for the state were some nattar. In a period of increased flux, there is no reason why some members of a declining class cannot actually enhance their positions. Furthermore, the argument here is not that the nattar were extinguished as a class, but rather that the conditions for their reproduction had received a serious setback. And setbacks for some are opportunities for others, even within the same class.
51. A full corroboration of this thesis must await more systematic research into revenue farming in the seventeenth and eighteenth centuries. But one does come across some signs pointing to its veracity. Irschick [1994: 47] cites an instance of tax farmers being reluctant to enforce new, higher rates of revenue on villagers, fearing increased resistance. This points both to the relatively feeble means of coercion at the disposal of the former, as well as to the increased confidence of the latter.
52. Ramaswamy [1985a: 419, 424] and Ramaswamy [1985b] generally argue for a steady increase in artisanal income and status through the Vijayanagara period.
53. For the practice of advances, see Parthasarathi [1992: 78–91]. For the failure of merchants to

- gain control over the labour process, see Palat [1988: 263,310].
54. Ramaswamy [1985b] has argued that the increasing demand for textiles led to the emergence of masterweavers who employed other weavers as wage labour. But her method for arriving at this conclusion has been effectively criticised by Parthasarathi [1992: 106–9] who convincingly argues for the persistence of artisanal production in this industry.
 55. Despite the tenor of her articles, which suggest a self-propelled process of growth, Ramaswamy [1985a: 422,424; 1985b: 301,307] admits that the demand for artisanal goods mainly came from these quarters. This is also echoed by Palat, who adds that much of the new demand was for high-quality textiles – issuing, of course, from the temples and elites – which accounted for only a fraction of the total quantity produced. The vast bulk of production was of coarse textiles. See Palat [1988: 264–5, 289].
 56. Turning again to Ramaswamy, it is perhaps significant that while she includes blacksmiths, potters, and tanners among the artisanal groups on which there is information for the Vijayanagara period, she only lists metal workers, textile producers, masons, and carpenters as the groups experiencing growth. The latter is the very set of artisans which would have produced goods for elite consumption, while the former would have been more deeply enmeshed in local production. That this group did not experience similar growth is perhaps more evidence for the skewed nature of the demand for commodities. See Ramaswamy [1985a: 419]. This is reinforced by the list of commodities she submits as being in heaviest demand: textiles, gold jewelry and ornaments, brassware, and armory.
 57. See the articles by Robert Brenner in Aston and Philpin [1985].

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