

# Credit Merchandising in the Postbellum American South: Information and Barriers to Entry

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## Abstract

Roger Ransom and Richard Sutch's research on the social and institutional changes in the postbellum American South, summarized in their *One Kind of Freedom*, raised many controversies. One of them concerns the degree of competition among the advancing merchants of the rural South. Ransom and Sutch's assertion that such merchants held a "territorial monopoly" is usually criticized as being at odds with the high level of postbellum entry in the rural merchandising sector and the absence of significant costs to entry. The question is still open, as shown by a recent special issue of *Explorations in Economic History*. This paper offers a contribution to this controversy by showing that high level of entry in the market and excessively high prices need not to be in conflict. In particular, using the theory of incomplete information games to study the competition between an advancing merchant and a potential entrant, the practice of over-pricing is shown to be an equilibrium behavior if interpreted as a way of signaling information about the market riskiness.

## Riassunto

*One Kind of Freedom*, che contiene una dettagliata analisi sui cambiamenti sociali, istituzionali ed economici nel Sud degli Stati Uniti dopo la guerra civile, ha sollevato numerose controversie. Fra queste, quella riguardante il livello di competizione nel mercato delle merci acquistate a credito dai contadini. La teoria di Ransom e Sutch, secondo cui il mercato delle merci a credito era a tutti gli effetti un monopolio (rispetto al territorio in cui ogni negozio operava), è stata spesso criticata perché difficile da giustificare visti l'elevato numero di nuovi negozi aperti nel periodo in esame e l'assenza di significativi costi di entrata. La questione non è ad oggi risolta, come dimostra un recente numero speciale della rivista *Explorations in Economic History*. Questo lavoro contribuisce al dibattito mostrando che prezzi molto elevati (anche superiori ai prezzi di monopolio) possano essere compatibili con l'aumento di competizione dovuto all'apertura di nuovi negozi se interpretati come un modo per segnalare informazione sul livello di rischiosità del mercato. Questo

viene fatto rappresentando la competizione fra il mercante e un potenziale entrante come un gioco ad informazione incompleta. La rilevanza del modello per l'analisi dell'economia post-guerra civile del Sud degli Stati Uniti è a lungo discussa.

## 1 Introduction

Ransom and Sutch's *One Kind of Freedom*<sup>1</sup> gives a thorough account of the economic and social history of agriculture and rural financing in the South of the United States after 1865. According to Ransom and Sutch, the poor performance of the economic institutions emerged after the Civil War hindered the accumulation of capital and the growth of the Southern economy. Among such institutions, the rural merchandizing system played a key role: monopolistic country stores controlled both the credit and the merchandising markets of the rural South, charging excessively high interest rates on goods bought on credit and providing credit only on the condition that their customers grew cotton. This system resulted in debt peonage and in the persistence of cotton as the prevalent Southern crop long after this choice had ceased to be convenient.

Ransom and Sutch explain debt peonage as a consequence of the “territorial monopoly” the rural stores enjoyed. Looking at the geographical distribution of the rural stores in the Cotton South,<sup>2</sup> they show that the average distance between any two stores was too big to allow the customers to sample more than one store. Furthermore, the practice of buying on credit and using the future crop as collateral, coupled with the frequent inability to fully repay debts at the harvesting season, contributed to tie the customer to his merchant.

Many conclusions that Ransom and Sutch reached in their book raised controversies. In particular, the theory of a “territorial monopoly” is, according to some,<sup>3</sup> at odds with two observations on the postbellum stores: the low entry costs due to the limited capital required to start a new business operating, as the stores were, on credit<sup>4</sup> and the high number of new stores that entered the Southern markets from 1867 to 1880.<sup>5</sup>

These two observations led some scholars to question Ransom and Sutch's analysis. Some believe that the estimate of the rate of interest implicit in the two-price system, one for cash and the other for time payments, is biased upward.<sup>6</sup> However, the existence of debt peonage and the fact that

stores had usually some sort of monopoly power is supported by many reports of the time.<sup>7</sup> Others think that high credit prices were justified by the default risk and that the risk-adjusted rates of return to store owners were reasonable.<sup>8</sup>

Despite a quarter of a century has elapsed since Ransom and Sutch's book was written, most of these controversies are still unresolved. Given their importance in evaluating the economic conditions of the african-americans, the question has recently received new attention in a special issue of *Explorations in Economic History*.<sup>9</sup>

This paper offers an alternative explanation of why excessively high interest rates were compatible with sustained entry in the market and no barriers to entry. Our theory relies on the fact that the incumbent store owners had privileged access to information on the farmers' credit-worthiness and interprets high prices as signals to scare potential entrants away. The theory of incomplete information games is applied to the furnishing economy of the South to show that prices could be used as devices to transmit the information that the customers had poor credit records. Such signals, by revealing that the market was not profitable enough to support new stores, induced the potential entrants to stay out. The analysis also reveals that a certain amount of entry is compatible with such behavior, because new stores would open whenever the customers' credit records were good. Such an equilibrium behavior would explain why, on average, prices could be high despite the opening of new stores.

The paper is organized as follows. In the next section we review the pre and post war organization of agriculture production in the South, and its distribution and financing. In particular, we compare the plantation system with the tenant farmer system in order to understand what shaped the change in institutions. Particular emphasis is given to the way the two systems were financed and to the role of the factor versus that of the advancing store. In Section 3 we present Ransom and Sutch's "territorial monopoly" theory, according to which one of the main sources of market

failure in the postbellum Southern economy was the monopolistic power of the country stores. We also examine some of the controversies that this theory has raised and discuss few open questions. In Section 4 we look at the competition process between an advancing merchant and a potential entrant by introducing, as a novel element of the analysis, the advancing merchant's informational advantage on his customers' credit standing. In particular, the section gives a non-technical summary of the results one gets representing the furnishing economy as a model of entry in which the incumbent merchant has privileged information on his customers' credit standing with respect to potential entrants. The complete analysis of the asymmetric information game representing the competition process is given in the Appendix. Finally, in Section 5, we offer some conclusions.

## **2 Postbellum economic and social institutions**

Before the Civil War the plantation system made the South a prosperous economy. The plantations were engaged in the extensive production of crops, like sugar, cotton and tobacco, destined for the great part to markets in the North of the Union or abroad. The transactions with non-Southern markets were handled by specialized intermediaries called factors. The factorage system started in the colonial period when planters shipped their crops to England, entrusting a factor, usually based in London, to sell them and use the proceeds to buy goods and commodities to be shipped back to the colony. After the Revolution the system survived and it actually strengthened as the trade center shifted from London to the new large cities of the Union. Charleston, Wilmington, Mobile, New Orleans and other coastal cities became the seat of operation for numerous commissioner merchants.<sup>10</sup>

The primary services offered by the factors were the sale of the crops and the purchase of the supplies needed to run the plantation. Typically, the factor's activity was not restricted to the mere handling of goods. Rather, it encompassed the supply of all the financial services related with such transactions and, frequently, even of those unrelated with them. For example, the

factor played as intermediary between the planters and the city banks, usually by endorsing the planters' promissory notes. Since the factor handled all of his customers' market dealings, he knew thoroughly their economic and financial strength and, thus, he was willing to guarantee for their good standing.

After the Civil War the old system collapsed; the tenure system and the credit merchandising system filled the vacuum left by the end of slavery and of the factorage system.

The abolition of slavery by the Thirteenth Amendment to the Constitution required new ways to organize agriculture labor. In 1865 and 1866, most of the prewar plantations had been re-established and the new freedman were offered wage, lodging and rations in exchange for their labor. New incentives, in the form of tournaments among work gangs, were introduced to substitute for the use of coercion and corporal punishment.<sup>11</sup> These experiments, however, were short-lived. In the next few years, a change in both the planters' and the freedmen's attitude towards the fixed wage contracts resulted in their demise.<sup>12</sup>

On the planters' side, in 1866 and 1867, a sharp decrease in the price of cotton and a prolonged drought jeopardized the profitability of the plantations. Confronted with the ensuing economic losses, the planters tended to blame the unwillingness to work of the freed slaves. Furthermore, the new system exposed the planters to the opportunistic behavior of the workers. The abolition of slavery caused a considerable decrease in labor supply—through an obvious increase in the amount of leisure—thus giving the workers a remarkable bargaining power: at the beginning of the picking season they could ask an increase in wage or better condition of work not provided for in the contract and get away with it, simply by threatening the planters of leaving the plantation.<sup>13</sup>

Discontent was spreading among the emancipated blacks too. Very little had changed with respect to slavery, except for wages. Plantations' workers were often living in the old slaves' cabins, eating the same rations and

wearing the same clothes as they did as slaves. The blacks, usually illiterate and untrained to negotiate a contract, were in some cases cheated and defrauded by their masters. Even when the plantation owner was honest and fair, the postbellum shortage of money did not help. Reports show that the planters were not always able to pay the workers at the agreed time, thus contributing to the discontent.<sup>14</sup>

Eventually, the freedmen pushed for alternative arrangements that gave them independence from the old masters. The plantation lands were divided in many small plots and rented to both white and black farmers. These tenant contracts ranged from fixed-rate lease to sharecropping. Sharecropping itself could take different forms. Sometimes the farmer agreed to pay a fixed percentage of his crop as rental for the land. More often he was supplied not only the land but also farm tools, animals and fertilizers.<sup>15</sup>

The introduction of the tenant system caused a drastic decline in the farm size. From 1860 to 1880, in the nine large cotton-planting states, Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Texas, the size of the average “farm” declined from 347 acres to 156 acres and the number of farms increased from 449,936 to 1,110,294.<sup>16</sup> By 1880 the plantation system had ceased to exist.

With the change in labor organization came a change in the intermediation and financial services to agriculture. The kind of intermediation that the factors used to offer to the planters did not fit the tenant farmers. A small family farm had no need to move supplies in big quantities as the former planters did. As for credit and the endorsement of promissory notes, tenant farmers did not have land or slaves as collateral for their loans; they could only offer their future crops as a guarantee but the factors, living in the big seaport cities, could not possibly undertake the supervision of a myriad of small farms to make sure that the crop was up to the amount of the debts. Thus, such basic liaison between the farmers and the city banks disappeared.

Banks also failed to directly supply credit to Southern tenant farmers.



Before the war, Southern banking outsized the northern in terms of amount of capital invested, banknotes issued and deposits, but it deeply suffered the devastating blow of the outcome of the war. Most state banks had invested in the Confederate Government notes and bonds and went bankrupt when these financial assets lost their value. Immediately after the war, the shortage of money hindered a swift resumption of credit activities and the system collapsed. In 1865 only a few Southern banks reopened their doors.<sup>17</sup>

The National Banking Act, which was passed in 1863 while the South was out of the Union, perpetuated these initial difficulties. The Act ruled that no national bank could be chartered with a capital of less than \$50,000. It also imposed restrictions on loans, by outlawing mortgages on real estates. Banks could still receive a charter from the state but in 1866, to induce state chartered banks to become national, a 10% tax on all state bank issued notes was introduced. As a last resort there were unchartered private banks. However, without charter they could not issue banknotes, leaving them with no means to finance their activity.<sup>18</sup> In the North, unchartered banks could use demand deposits, that is accounts against which checks could be written, to finance their business. The postbellum South, however, was bereft of any kind of savings and, thus, could not have a significant amount of deposits. The Act, thus, had the effect of restraining the growth of banking over the rural areas of the United States, where the limit imposed on capital was too high compared with the prospective amount of the deposits. In this way, it promoted a transfer of funds from agriculture to industry.<sup>19</sup>

The condition of Southern banking in the fifty years after the Civil War can be assessed by looking at Table 1, which shows the geographical distribution of United States banks from 1880 to 1909. In 1900 Southern banking had not yet recovered from the wartime collapse: with only 1,617 banks, the South had less than one sixth of the banks in the United States. Among Southern states, cotton states ranked even lower.

[TABLE 1]

The total number of banks, however, does not give a full picture of the shortage of banking services in the rural areas. National and state banks, for example, were likely to be big city banks. The available statistics do not allow to recover the number of banks in the rural area, but we can get a (likely upward biased) estimate of their number by subtracting from the number of commercial banks the number of national and state banks. This is termed *Small Banks* in the last four columns of Table 1. In 1880, there were a few savings and private banks in the Cotton South but they progressively disappeared in the following years. In 1900 the absence of small banks is striking: two out of five states had none, Louisiana had only two.

The differences in availability of banking services between the Cotton States and other parts of the United States is even more striking if we look at Table 2, which shows the ratio of inhabitants to each bank. In 1900, for example, the ratio was 7,337 persons per bank in the United States, 13,655 in the South and 17,548 in the Cotton States; therefore the South and the Cotton States had, respectively, a ratio of about two and two and half times those of the United States. Differences are even more marked when we look at small banks: in the same year there were 33,372 persons per small bank in the United States as a whole; in the Cotton South the ratio was more than ten times that, a striking 378,090.

[TABLE 2]

The influence of the National Banking Act lasted through the beginning of the twentieth century. In 1900 the Gold Standard Act lowered the capital requirement to \$25,000 for towns with less than 3,000 inhabitants. But the act came too late both because the use of demand deposits had made the charter less essential to the banking activity and, especially, because the habit to get credit from the stores had already been strongly established.

The shortage of credit supply after the war was even worse if compared with the demand side. Credit, in fact, was in big demand in the first years

after the war because the freedman who had turned into farmers had no capital to start the planting season, their only resource being their labor.

For lack of other credit intermediaries, the task of financing the farmers was taken up by the rural stores. Before the war, rural stores had played a marginal role in the plantation economy. The planters, dealing in large quantities, could get cheaper goods from the cotton factors who, in turn, dealt directly with the city wholesalers. Only occasionally the planters went to the rural stores and it was not uncommon to find villages without any store. Country stores traded for the most part with small farms that had neither the collateral nor the volume of trade to enter the factorage system. To these farms the store-keeper offered, on a different scale, the same services that the factor offered to the planters: he supplied any kind of commodities required and he managed the sale of the crops. Stores usually played the role of first collecting agents for cotton. The crops, gathered from the numerous farms, were ultimately marketed through the intermediation of a factor.<sup>20</sup>

The number of stores remained very small throughout the antebellum period. In 1840, the state of New York had one retail store to each 199 inhabitants and Pennsylvania had one to 264 persons. In the same year the ratio in Louisiana was 474 and it was 657 in Alabama. Small towns with more than one store could only be found where farms were more numerous.<sup>21</sup>

Not many stores survived the war and the financial collapse of the Confederate system that followed.<sup>22</sup> However, after the war the recovery of retail merchandising was quite rapid. Wholesalers from the North were eager to benefit from the enormous potential for business that the Southern markets offered and they were willing to overcome the shortage of money by selling on credit. As in any other transactions on credit, there was the problem of verifying the credit worthiness of the stores. But this problem was solved through the services of an independent debt rating agency, the R.G. Dun Mercantile Agency, which supplied information on the reliability of the business firms investigated and their credit ratings. The Mercantile Agency, founded in New York in 1841, after the war extended promptly

its activity to the South. Thanks to this development, the Southern stores could receive goods on consignment and pay for them from six months to one year later.<sup>23</sup>

This credit could, in turn, be passed to the farmers, as long as the advancing merchant could get some guarantee in case the farmer failed to pay. The only collateral that most farmers could offer was the future crop. Thus, shortly after the end of the war, crop lien laws allowing to mortgage the ungrown crop were passed in all the cotton-planting states. The mortgage could then be used to get credit to buy the supplies required to grow the crop itself and pay for the use of the land.

The introduction of the crop lien laws was initially accepted as the only salvation for a wrecked economy and it was meant to be temporary. Instead, the new laws became more widespread than slavery itself, since they extended their effects to white farmers.<sup>24</sup> They gave the stores enormous power and contributed to turn the local merchant from a simple merchandising agent to the financial and banking institution of the rural South.<sup>25</sup>

In order to decide how much to advance to their customers, merchants needed to evaluate their customers' credit worthiness. However, the proximity of the merchant to his customers made the task, if not easy, at least feasible. According to reports of the time, storekeepers routinely spent some of their time travelling in the countryside to oversee the crops and the effort farmers were spending in growing them.

This overview shows that it was a combination of legal, economic and organizational reasons that led to the emergence of the advancing merchant as supplier of both goods and credit. This double role had important economic consequences that deserve to be further inquired. This is what we do in the next section.

### **3 Monopolistic rural stores?**

A basic tenet of Ransom and Sutch's *One Kind of Freedom* is that rural merchants used to charge exorbitant interest rates for the loans they made.

This point is open to dispute since interest rates were not explicit: in the nineteenth century, usury laws prohibited the taking of interest exceeding a certain rate; so, in order to circumvent these laws and simplify computations, the rural store used to charge two different prices, one for cash purchases and the other for goods bought on credit.

All the reports of the time show that credit prices were much higher than cash prices; however, they do not agree on the size of the difference. Ransom and Sutch, in their thorough inquiry, find that the implicit interest rate averaged 60%, an amount that, by any reasonable assessment of default risks and cost of supervision, was far in excess of the opportunity cost of capital.<sup>26</sup>

Ransom and Sutch maintain that the exorbitant prices are evidence of a clear monopoly power of the Southern rural stores that they justify on the basis of a model of spatial competition. They argue that, even if the stores were quite evenly scattered over the area, they could enjoy a geographical limited monopoly due to the high cost of travelling. They estimate an average distance between stores from 5.5 to 9 miles, a long distance in the rural South of 1880. Due to this cost, the rural stores in the South had, in their areas of influence, very limited competition and enjoyed a “territorial monopoly”.

The conclusion that competition was restrained simply by transportation costs, however, is not convincing. In models of spatial competition with free entry the mark-up over marginal cost is proportional both to transportation costs and to the fixed cost of entry.<sup>27</sup> In the rural South, neither of these costs seem high enough to justify the observed mark-up.

Let us consider transportation costs first. Even if, as Ransom and Sutch suggest, it could take a farmer “the better part of a day” to sample two stores, we know that agriculture is characterized by periods in which the farmers are not very busy. In days of reduced activity the opportunity cost of the trip could be very low. Furthermore, from the selection of goods that were usually purchased, we can infer that there was no need to go often to

the store. Items commonly bought were farm implements, various kinds of fabric, salt pork, corn and molasses. Fresh vegetables and fruit were not in the list of the goods commonly purchased.<sup>28</sup> These two observations suggest that the actual cost of transportation need not be very big.

The same can be said for the fixed cost of entry. The fact that the scale of operations was usually small suggests that fixed costs were likely to be moderate. Reports from the Mercantile Agency show that 36.5% of the stores had a “pecuniary strength”<sup>29</sup> of less than \$2,000 and 48% of less than \$5,000.<sup>30</sup> A study for Alabama shows that merchants had a capital lower than that suggested by Ransom and Sutch and that their pecuniary strength went down over the period 1870–1900.<sup>31</sup> Furthermore, the stores could enjoy favorable terms of credit from competitive northern wholesalers, thus limiting their capital requirement to the collateral requested by their suppliers.

Ransom and Sutch, in a subsequent contribution, suggest that a model of spatial competition with free entry need not be adequate because the territorial monopoly of the country store was protected by various barriers to entry. Among these, they list ostracism of outsiders by the Southern society, the fact that landlords could hinder the shift of tenant farmers away from their established merchant, the political and social power of the established merchants that discouraged the customers from shifting their patronage elsewhere, and economies of scale which made firms with capital lower than \$5,000 poor risks.<sup>32</sup> Notice, however, that all of these reasons, except for economies of scale based on capital requirements — a controversial point, as we pointed out above — are sociological in nature; therefore, Ransom and Sutch’s explanation of barriers to entry abandons a pure economic ground.

The existence of barriers to entry, moreover, seems at odds with the data on the number of new stores. Goldin, for example, reports that from 1870 to 1885 there was a rapid growth in the number of stores in the Cotton South; the average annual rate of increase between 1870 and 1875 was 18.5%, 4.9% between 1875 and 1880 and 7.8% from 1880 to 1885. Similarly, in a study of

the furnishing sector in Alabama, Gill finds that a steady process of market penetration took place in the last three decades of the nineteenth century, with the number of farms per store decreasing steadily over time.<sup>33</sup>

These data, together with the evidence of monopoly power, leave us without an economic explanation of why stores could charge excessive credit prices. In the next section we try to give one.

## 4 Overpricing as an entry deterrent

The overview of the postbellum rural South we gave in the last two sections stresses the importance of the advancing stores' double role: credit intermediaries and supplier of goods. So far, this essential aspect has not been formally considered in economic models of competition among furnishing merchants. We believe that this is crucial in understanding the economics of the rural stores.

The starting point of our analysis is that the monopolistic power that stores had in the market for credit had an important influence on their economic power in the market for goods; therefore, credit intermediation and the price of goods cannot be analyzed separately. More precisely, as we saw in the previous section, farmers' supervision was part of the advancing merchant tasks, since repayment of the credit advanced depended on future crops. This necessary surveillance gave the established stores an informational advantage with respect to potential entrants. We claim that this asymmetry of information influenced the way stores set their prices and, therefore, shaped the competition between merchants. In other words, the competitive behavior of the stores cannot be analyzed on the basis of spatial competition considerations alone because this would neglect the informational advantage merchants got from playing the role of a financing institution.

Our model takes as given Ransom and Sutch's simplifying assumption that stores in different villages were not in competition with each other and investigates the competitive behavior of an incumbent store and a poten-

tial entrant in a single village, under the hypothesis that the established merchant had private information on the village farmers' financial strength.

We consider a simple two-period model in which a potential entrant chooses whether to enter the market after having observed the price charged by the incumbent. Since the incumbent knows the default rate when he makes his pricing choice, the incumbent's price may contain information on what he knows; in other words, prices may be used to signal the quality of the market and, thus, to affect the entry decision.

Using prices as signals has two consequences. First, if under symmetric information the price reflects only costs and the degree of competition, when information is asymmetric the price level is also determined by being used as signal. Second, if prices are used to deter entry, the incumbent may enjoy barriers to entry beyond those implied by fixed costs.

The analysis of the role that these two facts play on the bias that asymmetric information imposes on prices and on the existence of informational barriers to entry is based on a signaling game whose assumptions and equilibria are presented in the Appendix. Here we give a non technical summary of our main findings.

Suppose, for simplicity, that there are only two types of markets: high and low default rate markets and that a potential entrant is not interested in a high default rate market because the latter does not allow two stores to break even.

If information on the default rate was available to incumbents and entrants alike, potential entrants would stay out from markets with high default rate and they would enter those with low default rate. Under such conditions, prices would not have any signaling function and we would expect them to be high in bad default markets as the result of both monopolistic power and higher rates of default and to be low in good default rate markets because of both competition and a lower default rate.<sup>34</sup>

When information is asymmetric, however, the economic conclusions on prices and entry can be very different because prices may be used to send



information on the default rate to the potential entrant; this signaling opportunity changes the equilibrium behavior because the potential entrant's entry decision may now depend on the incumbent's pre-entry pricing choices.

Two classes of equilibria potentially exist for this simple signaling game: separating and pooling. In a separating equilibrium prices play a signaling role; therefore, potential entrants may look at them to "separate", i.e. distinguish, good markets from bad markets. In a pooling equilibrium, on the other hand, no information is signaled. Thus, entrants do not learn anything about the quality of the market from the incumbent's pricing choice but prices are nevertheless influenced by the fact that they could, potentially, be used as signals. Given reasonable economic assumptions<sup>35</sup> the two types of equilibria are characterized as follows.

In separating equilibria prices are never lower than the monopoly price. This is so because high prices signal that the monopolist suffers large costs to recover his customers' unpaid credit and, therefore, the potential entrant's expectation on profit is decreasing in prices. This induces incumbents with high default rate to price higher than their monopoly price, even if this signaling strategy is costly in the short period. Incumbents with a low rate of default, on the other hand, in the second period are going to lose their monopoly regardless of how they price and, therefore, they charge their monopoly price.<sup>36</sup> Separating equilibria, then, offer an explanation of why overpricing is consistent with entry.

Let us now look at pooling equilibria. These are characterized by no entry and prices that could possibly (but need not) be larger than the monopoly price. Pooling equilibria, therefore, do not necessarily explain the observed coexistence of overpricing and entry. However, these equilibria exist only if duopoly losses in high default rate markets are high and if a large share of the markets are high default rate. Based on our overview of the postbellum rural South, we believe that this was probably not the case. In fact, even if the percentage of "bad" markets was probably large, , in particular immediately after the war, losses were likely to be limited given

the reduced scale of the stores and the fact that entry costs were marginal.

## 5 Comments and conclusions

This paper analyzes a model of competition among advancing merchants in the postbellum rural South of the United States. The analysis shows that over-pricing could be an equilibrium behavior even in the absence of entry costs. In fact, a price higher than one's monopoly price could be used as a signal about the quality of the market when the information between the incumbent and the potential entrants was asymmetric. The analysis also reveals that a certain amount of entry is compatible with such over-pricing, as in our model entry occurs in the best segment of the market. The model we proposed, therefore, provides a possible solution to the controversy raised by Ransom and Sutch's theory of a 'territorial monopoly'. By doing so, it suggests that the lack of market institutions to collect information on the farmers' financial worthiness was one of the causes of the postbellum South market failure.

In our model the monopolistic power of the country stores stems from an informational advantage. The facts presented in Section 2 suggest that the landlord, as a party in the sharecropping contracts, knew the financial soundness of his tenants as much as the stores did. Therefore, according to our model, landlords had a strong incentive to cash their informational rent by entering the merchandising business and, conversely, merchants had an incentive to acquire the land in order to keep their monopoly on information. This occurrence is actually confirmed by the reports of the time. Woodward, for example, reports that:

“a strong tendency early asserted itself [...] for merchant and planter to become one—that is, for the merchant to acquire the farms of the hapless landowner, and for the more fortunate planters to move to town and become supply merchants.”<sup>37</sup>

A possible criticism of our model is that it can hardly explain the per-

sistence of both overpricing and entry over time. In fact, after the first period, all information become and overpricing to deter entry is no longer necessary. Similarly, all entry occurs once and for all at the beginning of the second period. However, this is an artifact of the simplifying two-period assumption. A situation of perpetual signaling could be obtained, at the cost of more technicalities, along the line of Mester by assuming that the default rate changes across periods and that each year default rate is only imperfectly correlated to the next.<sup>38</sup> This is a reasonable assumption because the customers' ability to repay their debt in a single year was likely to be influenced by the weather, the state of the cotton market and other variables that changed over time.

## A Appendix: the model and its equilibria

We present a model of entry with asymmetric information in order to show the importance that the informational advantage of the incumbent store had in credit merchandising.<sup>39</sup>

Consider a two period game with two players, an incumbent  $I$  and a potential entrant  $E$ . The incumbent chooses a price  $p_I$ ; after observing it, the potential entrant decides whether to enter, charging a price  $p_E$ , or not. The entrant can always get a profit of zero by not entering the market. Players have the same discount factor  $\delta$ .

Assume constant returns to scale and let  $c_1$  be the marginal cost of supplying the good. Since the commodity being sold is a credit good,  $c_1$  includes both the wholesale price paid by the store and the costs connected to the credit, i.e. the opportunity cost of capital and the cost of supervision.

Let  $Q(p)$  be the downward sloping market demand at price  $p$ . The market is characterized by an average default rate  $d$  that could be low ( $d = d^L$ ) with probability  $x$  or high ( $d = d^H$ ) with probability  $1 - x$ , where  $d^t \in [0, 1]$  and  $d^L < d^H$ . Only the incumbent knows  $d$ . In case of default, the store can recover the unpaid credit through the seizure of the collateral or by extending the credit to the following year. This has a cost of  $c_2$  per

unit of good sold.

Let  $M^t(p)$  be the one-period monopoly profits<sup>40</sup> at price  $p$  when the default rate is  $d^t$ ,  $t = L, H$ . Then

$$M^t(p) = Q(p) (p - c_1) - c_2 Q(p) d^t.$$

Define  $p_M^t$  as the monopoly price for a default rate  $d^t$  and  $M^t$  as the corresponding level of profit, that is,  $M^t = M^t(p_M^t)$ .

We assume that the entrant observes  $d$  upon entering the market, so that the post entry solution is the complete information solution. Define  $D_I^t$  and  $D_E^t$  to be, respectively, the incumbent's and the entrant's complete information duopoly profit when the default rate is  $d^t$ , where  $D_E^t$  could possibly include a cost of entry.

The facts presented in the previous sections and basic economic principles lead to the following assumptions on the values of the monopoly and the duopoly profits:

- (A1)  $D_I^t < M_I^t$  for  $t = L, H$ ;
- (A2)  $D_E^H < 0 < D_E^L$ ;
- (A3)  $M^H - D_I^H < M^L - D_I^L$ .

The first two assumptions are straightforward: (A1) says that a store is better off if it is the only store in its village and (A2) that a high default rate market is not good enough to support two stores and, in particular, that the entrant in such market cannot break even. Assumption (A3), which says that a store in the high default village has a greater advantage on the entrant than one in a low default rate village, follows from the terms of the crop-lien laws. According to reports of the time, the farmer who was granted by the store an extension of the debt into the following year was bound to that store by the terms of the crop-lien. Then, the lower the default rate the larger the new store's chances of taking away customers from the incumbent, because the number of customer tied by law to the incumbent store was smaller.

We also assume that:

$$(A4) \quad M^L - M^L(p_M^H) < \delta(M^L - D_I^L).$$

Assumption (A4) rules out the uninteresting case in which the information on the default rate can be strategically conveyed at no cost. For more on its implications see Footnote 44.

The subgame perfect equilibrium in the benchmark case of complete information is simply found by backward induction. By Assumption (A2), when the default rate is high the entrant stays out because he prefers a profit of zero to the loss that he would incur by entering; instead, he enters when  $d$  is low. Since this entry strategy does not depend on the pricing policy of the incumbent, the latter cannot influence the entrant's decision. Then the best he can do in the first period is to charge his monopoly price. This leads to the following proposition:

**Proposition 1** *When the entrant knows  $d^t$ , in the subgame perfect equilibrium the incumbent charges his monopoly price  $p_M^t$  and the entrant enters only if the default rate is low.*

Therefore, when the information on the market is public, we expect to see more than one store whenever the market is big enough to support them.

Things may be very different, however, when the incumbent store has private information, because the price might be used to send information on the default rate to the potential entrant; this signaling opportunity changes the equilibrium behavior because the the potential entrant's entry decision could now depend on the incumbent's pre-entry behavior.

To see why, consider, for example, the complete information equilibrium strategies. With asymmetric information the incumbent's strategy of charging the monopoly price, i.e.  $p_M^L$  or  $p_M^H$  depending on the true default rate, need not be the best choice if the default rate is actually low. In fact, when the price is  $p_M^H$ , the potential entrant conjectures that the market is high default and decides to stay out. But then, an incumbent with a low default rate may try to deter entry by charging  $p_M^H$  to mislead the entrant. In

particular, this could be a profitable deviation if the profit lost by not charging one's monopoly price is more than recovered by not sharing the market with a competitor in the second period. If this is the case, it is not rational for the entrant to infer that the default rate is high when the first period price is  $p_M^H$  and his entry decision may, accordingly, be changed. Therefore, the existence of private information may influence both the pricing and the entry behavior.

Before illustrating the equilibria of the game, we consider the players' strategy sets. Since the incumbent behavior may depend on his information, we shall consider two types of incumbent: a high type, whose default rate is  $d^H$ , and a low type, with default rate  $d^L$ . We denote by  $p(H)$  and  $p(L)$  the pricing strategies of the two types. The potential entrant cannot condition his entry choice on the default rate since he does not know it. However, before entering the market, he observes the price and he can condition his entry decision on it. The entrant's behavior depends also on his conjectures about the default rate. We call these the entrant's beliefs. We let  $\mu(p) \in [0, 1]$  be the entrant's beliefs that the default rate is low and  $e(p) : \mathbb{R} \rightarrow \{in, out\}$  be his strategy when the incumbent charges  $p$ . A strategy and beliefs profile, therefore, is given by  $[p(L), p(H), e(p), \mu(p)]$ .

A Bayesian Nash equilibrium is given by a pricing strategy for each type of incumbent and an entry strategy and beliefs for the entrant such that the pricing and entry strategies maximize the expected profit at any information set (given the strategies of the other player) and the entrant's beliefs are "reasonable", i.e. consistent with Bayes' rule and the strategy profile.

Two classes of equilibria exist for this simple signaling game: separating and pooling. In a separating equilibria different types of incumbent play different pricing strategies, i.e.  $p(H) \neq p(L)$ . In this case, the information is fully conveyed because the potential entrant can infer the true default rate from the price he observes. Sometimes, however, the information is not revealed by the price because the price charged by the incumbent is the

same regardless of the true default rate, i.e.  $p(H) = p(L)$ . The equilibrium is said to be pooling because the first period price does not depend on the incumbent's type.

### Separating equilibria

In a separating equilibrium, the entrant can infer the true default rate by observing the price. Therefore, if the default rate is low he enters and if it is high he stays out; entry occurs as it would with symmetric information.

Prices, conversely, are influenced by their signaling function and in equilibrium they are never lower than the monopoly price. To see why, notice that a price  $p$  for an incumbent in a high default rate market to be a credibly signal must satisfy the two following conditions:

$$M^H - M^H(p) \leq \delta(M^H - D_I^H); \quad (1)$$

$$M^L - M^L(p) \geq \delta(M^L - D_I^L). \quad (2)$$

The first one, an individual rationality constraint, says that in case of high default the incumbent is willing to reveal his information because the profit lost by sending the signal  $p$  is smaller than the reward of keeping the monopoly. The second, an incentive compatibility constraint, ensures that under low default it is too expensive for the incumbent to mimic the signal of the other type and deter entry.<sup>41</sup>

The two conditions are illustrated by Figure 1. The two curves  $M^L - M^L(p)$  and  $M^H - M^H(p)$  in the figure represent the profit that the incumbent of type  $L$  and  $H$ , respectively, lose when they charge  $p$  instead of their monopoly price. Each curve intersects the  $x$ -axis at the monopoly price.<sup>42</sup> The two horizontal lines  $\delta(M^L - D_I^L)$  and  $\delta(M^H - D_I^H)$  represent, instead, the two types of incumbent's discounted loss in profit when entry occurs.

Condition 1 is verified for any price for which the thinner curve  $M^H - M^H(p)$  lies below the thinner line  $\delta(M^H - D_I^H)$ . Similarly, Condition 2 is satisfied by any price for which the thicker curve  $M^L - M^L(p)$  lies above

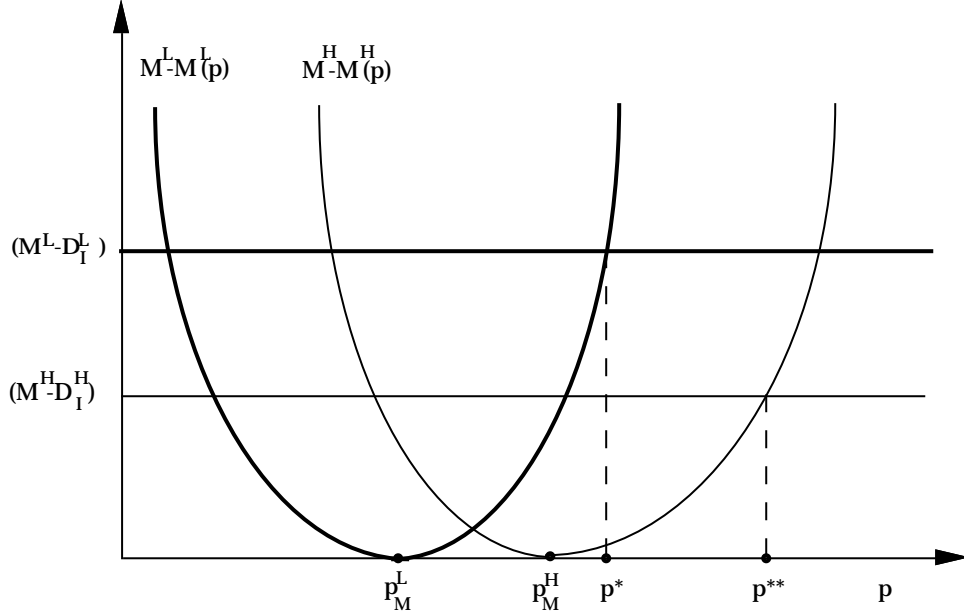


Figure 1: *Separating equilibrium prices.*

the thicker line  $\delta(M^L - D_I^L)$ . The intersection of the two sets is given by the interval  $[p^*, p^{**}]$ . This is the interval of possible separating equilibrium prices  $p(H)$  for the high default rate incumbent.<sup>42</sup> Since the interval  $[p^*, p^{**}]$  lies to the right of  $p_M^H$ , the incumbent with high default rate engages in overpricing. That is, he charges a price higher than his monopoly price in order to deter entry.<sup>44</sup> A full description of the separating equilibrium prices is given in the following proposition.

**Proposition 2** *In a separating equilibrium the low incumbent charges his monopoly price  $p_M^L$  and the high incumbent charges a price  $p(H) \geq p_M^H$ . Furthermore, entry occurs only when the default rate is low.*

*Proof:* Consider the profile:

$$[p_M^L, p(H), e(p) = \begin{cases} out & \text{if } p = p(H) \\ in & \text{otherwise} \end{cases}, \mu(p) = \begin{cases} 0, & \text{if } p = p(H) \\ 1 & \text{otherwise} \end{cases} ],$$

where  $p(H)$  satisfies Conditions 1 and 2.



First notice that by rationality of beliefs  $\mu(p)$  is consistent with Bayes' rule and the strategy profile for  $p = p(L)$  and  $p = p(H)$ . Bayes' rule does not apply for all other (out of equilibrium) prices, hence  $\mu(p)$  can be arbitrary at those prices.

Given  $\mu(p)$  and Assumption (A2), the entrant's strategy is a best reply. Moreover, any price different from  $p(H)$  triggers entry; therefore, by Condition (2), the low incumbent's best reply is his monopoly price and, by Condition (1), the high incumbent's best reply is  $p(H)$ . We conclude that the profile is a Bayesian Nash equilibrium.

To show that there are no other equilibrium outcomes, suppose that  $\mu(p)$  is such that it deters entry for some (out of equilibrium) price  $p \notin \{p(L), p(H)\}$ . Then, the low incumbent best reply would be to charge  $p$ . But then  $\mu(p)$  would not be rational.

Finally, since  $p_M^L < p_M^H$  and  $M^L - M^L(p)$  is increasing for  $p > p_M^L$ , by Assumption (A4)  $p(H) \geq p_M^H$ .  $\nabla$

Notice that the information can be credibly conveyed in equilibrium because over-pricing is more expensive for the low default rate incumbent; in fact, by paying the cost  $c_2$  to recover the unpaid credit for a lower portion of customers, he has lower average costs. For this reason, he does not want to choose  $p(H)$  and mimic the high default incumbent even if this would deter entry.

### Pooling equilibria

Before concluding that overpricing is the outcome of the game we need to analyze pooling equilibria. In these equilibria no information can be inferred because both types of incumbent charge the same price, that is  $p(H) = p(L) = \bar{p}$ .

A necessary condition for the existence of a pooling equilibrium is given in Proposition 3.

**Proposition 3** *A pooling equilibrium exists only if  $x D_E^L + (1 - x) D_E^H < 0$ .*

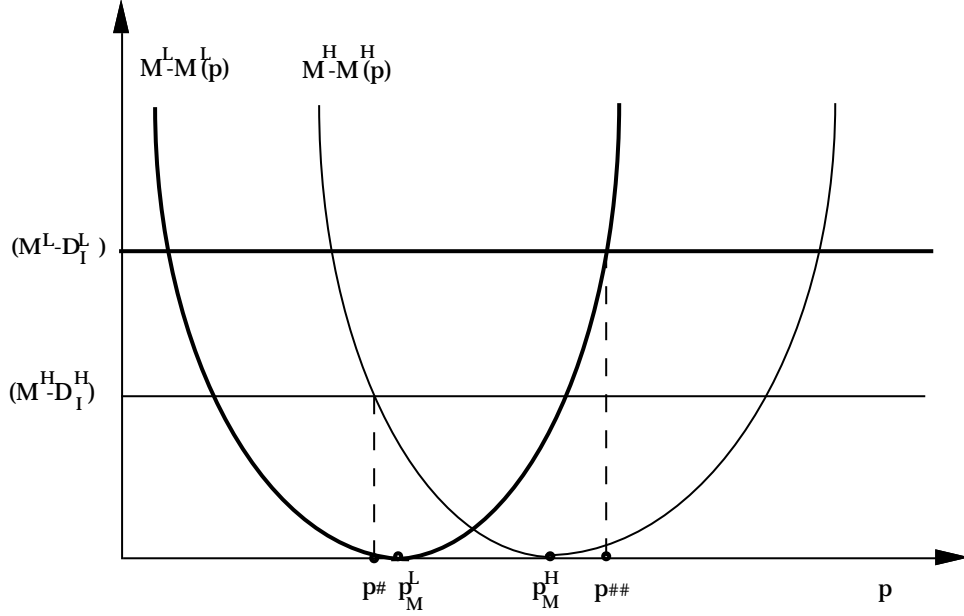


Figure 2: *Pooling equilibrium prices.*

*Proof:* Suppose  $x D_E^L + (1 - x) D_E^H \geq 0$  and consider a pooling equilibrium profile  $[\bar{p}, \bar{p}, e(p), \mu(p)]$ . By Bayes' rule  $\mu(\bar{p}) = x$  and, therefore,  $e(\bar{p}) = in$ . Since entry is not deterred, the best that both types of incumbent can do in the first period is to choose their own monopoly price. But  $p_M^L \neq p_M^H$ . Then the types do not pool.  $\nabla$

Under the condition of Proposition 3 a potential entrant prefers to stay out of the market when he is uncertain about its quality because his expected profit  $x D_E^L + (1 - x) D_E^H$  is negative.<sup>45</sup> Notice that entry is always deterred in a pooling equilibrium because, if it were not, both types of incumbent, faced with the sure end of their monopoly, would charge their own (different) monopoly prices.

The set of possible pooling equilibrium prices is characterized by the following two conditions:

$$M^L - M^L(\bar{p}) \leq \delta (M^L - D_I^L) \quad (3)$$

$$M^H - M^H(\bar{p}) \leq \delta (M^H - D_I^H) \quad (4)$$

Notice that, since the price is the same for both types, incentive compatibility is trivially satisfied. Still, to guarantee that  $\bar{p}$  is a pooling equilibrium price, the two individual rationality Constraints (3) and (4) must hold, i.e. incumbents with different default rates must both be willing to charge  $\bar{p}$ .

The set of pooling equilibrium prices is illustrated by the interval  $[p^\#, p^{\#\#}]$  in Figure 2, found as the intersection of the set of prices for which the thicker curve lies below the thicker line, as required by Condition 3, and the set of prices for which the thinner curve lies below the thinner line, as of Condition 4.

As Figure 2 shows, a pooling equilibrium price need not be larger than the monopoly price. However, for the particular market we are analyzing, pooling equilibria are not likely to exist, because the necessary condition for the existence of these equilibria is hardly satisfied. In fact, this would require a large negative value of  $D_E^H$ , the duopoly profit in a high default rate market, together with a high percentage  $x$  of high default markets. Even if  $x$  was probably large, particularly immediately after the war, the loss in a high default rate duopoly must have been small given the reduced scale of the stores and the fact that entry costs were marginal.

## Notes

1. R.L. Ransom, and R. Sutch, *One Kind of Freedom: The Economic Consequences of Emancipation*, Cambridge University Press, New York, 1977.

2. Ransom and Sutch's Cotton South includes seventeen economic regions in the former Confederate States that shared "common agriculture, demographic, economic, physiographic and historical characteristics". In particular, all regions produced mostly cotton and had made use of slave labor before the war. The regions cover most of the five Cotton States, that is South Carolina, Georgia, Alabama, Mississippi and Louisiana. See Ransom and Sutch, *ibid.*, pp. 273–294.

3. See, for example, the three articles in G.M. Walton and J.F. Shepherd (eds), *Market Institution and Economic Progress in the New South 1865–1900*, Academic Press, New York, 1981, by C.D. Goldin, "Credit Merchandising in the New South: the Role of Competition and Risk," J.P. Reid, "White Land, Black Labor and Agricultural Stagnation. The Causes and Effects of Share Cropping in the Postbellum South" and P. Temin, "Freedom and Coercion: Notes on the Analysis of Debt Peonage in One Kind of Freedom". See, also, I. Gill, "Furnishing Merchants and Commercial Development of the South: Alabama, 1870–1900," mimeo, 1989.

4. See Ransom and Sutch, *One kind*, op. cit., pp. 137–40 and S. Hahn, *The Roots of Southern Populism: Yeoman Farmers and the Transformation of the Georgia Upcountry, 1850–1890*, Oxford University Press, New York, 1983, p. 179.

5. Even if many stores went bankrupt over the years, the rate of entry was high enough to guarantee a steady growth in the number of stores over the first twenty-five years after the civil war. See Gill, *Furnishing*, op. cit., p. 16, Hahn, *ibid.*, pp. 177–78, and Ransom and Sutch, *ibid.*, pp. 140–46.

6. See Goldin, *Credit*, op. cit., and Temin, *Freedom*, op. cit., among others.

7. J.P. Bull, "The General Merchant in the Economic History of the New South", *Journal of Southern History*, 18, 1952, pp. 47–51; C.V. Wood-

ward, *Origins of the New South 1877–1913*, Louisiana State University Press, Baton Rouge, 1951, pp. 180–81; T. Clark, “Historical Aspects of Imperfect Competition in the Southern Retail Trade After 1865,” *Journal of Economic History*, 3, 1943, pp. 40–41.

8. For example, P. Coclanis, “1KF in the year Y2K: Framing Ransom and Sutch”, *Explorations in Economic History*, 38, 2001, pp. 58–63.

9. “One Kind of Freedom Reconsidered: African-American Economic Life in the Segregation Era”, *Explorations in Economic History*, 38, 2001, no. 1.

10. See L.E. Atherton, *The Southern Country Store, 1800–1860*, Louisiana State University Press, Baton Rouge, 1949, p. 36, and J.S. Bassett, *The Southerner Plantation Overseer as Revealed in His Letters*, Smith College, Northampton, 1925, pp. 221–225.

11. D.T. Carter, *When the War Was Over: the Failure of Self-Reconstruction in the South, 1865–1867*, Louisiana State University Press, Baton Rouge, 1985, p. 207.

12. Carter, *ibid.*, pp. 176–200; T. Glymp, “Freedpeople and Ex-Master: Shaping a New Order in the Postbellum South,” in T. Glymp and J.S. Kushma (eds), *Essays on the Postbellum Southern Economy*, Texas A.M. University Press, College Station, 1985, pp. 54–55; J. Mandle, “The Re-establishment of the Plantation Economy in the South,” *Review of Black Political Economy*, 3, 1973, p. 71.

13. An effort to curtail the freedmen’s bargaining power, mingled with strong social and racial conflicts, was behind the passage of the Black Codes. By reducing the mobility of the blacks and punishing those without a work, the Black Codes reduced the opportunistic effect. See Carter, *ibid.*, pp. 208–9; Glymp, *ibid.*, pp. 56–57; Ransom and Sutch, , *One kind*, op. cit., pp. 57–70.

14. Carter, *ibid.*, p. 208; Glymp, *ibid.*, p. 49.

15. Fixed rent or sharecropping without the supply of capital were usually not feasible in the first few years after the war. Many farmers, in particular among blacks, had no resources other than their labor. Lacking

work stocks and farming implements and with no cash to buy them, the farmer needed some sort of capital to start the planting season. See Mandel, *The re-establishment*, op. cit., p. 73 and H. Thompson, *The New South. A Chronicle of Social and Industrial Evolution*, Yale University Press, New Haven, 1919, pp. 65–69.

16. Woodward, *Origins*, op. cit., p. 178.

17. Ransom and Sutch, *One kind*, op. cit., p. 107–108.

18. E.Q. Hawk, *Economic History of The South*, Prentice-Hall, New York, 1934, p. 530–532.

19. R. Sylla, R., “Federal Policy, Banking Market Structure, and Capital Mobilization in the United States, 1863–1913,” *Journal of Economic History*, 29, 1969, pp. 657–664.

20. Atherton, *The Southern*, op. cit., pp. 14–16 and p. 29, and Hahn, *The roots*, op. cit., p. 171.

21. Atherton, *ibid.*, pp. 19–20 and pp. 41–44.

22. Hahn, *The roots*, op. cit., p. 177.

23. Ransom and Sutch, *One kind*, op. cit., pp. 117–121.

24. Woodward, *Origins*, op. cit., p. 180.

25. It was common for the stores to grant credit also for things different than purchases at the stores, such as medical expenses, rent and taxes. See, for example, G. Sisk, “Rural Merchandising in the Alabama Black Belt, 1875–1917,” in *Journal of Farm Economics*, 37, 1955, p. 711.

26. For details on Ransom and Sutch’s computation see Ransom and Sutch, *One kind*, op. cit., pp. 128–131 and Appendix D.

27. See, for example, S. Salop, “Monopolistic Competition with Outside Goods,” *Bell Journal of Economics*, 10, 1979, pp. 141–156.

28. Sisk, *Rural*, op. cit., pp. 709–711.

29. That could also include assets that were not used in the commercial activity.

30. Ransom and Sutch, *One kind*, op. cit., p. 138.

31. Gill, *Furnishing*, op. cit., p. 24 and Table 9.

32. R.L. Ransom, and R. Sutch, “Credit Merchandising in the Post-Emancipation South: Structure, Conduct and Performance,” in G.M. Walton and J.F. Shepherd (eds), *Market*, op. cit.

33. Goldin, *Credit*, op. cit., p. 12. and Gill, *Furnishing*, op. cit., pp. 16–25.

34. We rule out, as it is standard in game theory, non-credible threats of retaliation and price wars by the incumbent, i.e., we restrict to subgame perfect equilibria.

35. See the Appendix for the details.

36. An important aspect of a signaling strategy is that it must be credible, i.e. not easily copied by a low rate of default incumbent who wants to scare potential entrants away. In the separating equilibrium described, the information can be credibly conveyed because over-pricing is more expensive for the low default rate incumbent; in fact, by paying the cost to recover the unpaid credit for a lower portion of customers, he has lower average costs. For this reason, he does not want to charge the same price of a high default rate incumbent, even if this would deter entry.

37. Woodward, *Origins*, op. cit., p. 184. See also Bull, *The general*, op. cit., p. 39–40 and Hahn, *The roots*, op. cit., p. 175 and p. 183.

38. L. J. Mester, “Perpetual signaling with imperfectly correlated costs”, *RAND Journal of Economics*, 23, 1992, pp. 548–63.

39. A pathbreaking paper on the influence of asymmetric information on entry decisions is P. Milgrom and J. Roberts, “Limit Pricing and Entry under Incomplete Information,” *Econometrica*, 50, 1982, pp. 443–460. The observation that an incumbent with an informational advantage could price higher than a monopolist is in J. E. Harrington, “Limit pricing when the potential entrant is uncertain of its cost function”, *Econometrica*, 54, 1986, pp. 429–437.

40. Technical assumptions to guarantee the regularity of the problem are that  $M^t(p)$  is strictly concave in  $p$  and that a monopoly price exists.

41. As usual, the incentive compatibility constraint for the low incum-

bent and the individual rationality constraint for the high incumbent are satisfied when Condition 1 and 2 hold.

42. Notice that a downward sloping demand guarantees that  $M^H(p) - M^L(p)$  is increasing in  $p$  so that the two curves intersect only once. This is the single crossing condition.

43. Therefore, as it is common in signaling games, there is a multiplicity of separating equilibria.

44. When Assumption (A4) is not satisfied, the interval  $[p^*, p^{**}]$  shifts to the left and includes  $p_M^H$ . In this case the high incumbent could credibly signal the rate of default at no cost by charging his monopoly price. This qualifies the role of Assumption (A4). Without it, our conclusion that equilibrium prices are not lower than the monopoly prices would not change if we restrict attention to the equilibrium which minimizes the incumbent's cost of signaling.

45. Since the potential entrant cannot learn anything from the first period price, by Bayes' rule his beliefs are just his prior beliefs.



Table 1: **Geographical distribution of banks**

States	Banks of all Sorts <sup>a</sup>				Small Banks <sup>b</sup>			
	1880	1890	1900	1909	1880	1890	1900	1909
South Carolina	25	50	54	272	13	16	11	38
Georgia	71	92	181	573	58	20	9	34
Alabama	35	47	48	274	26	6	0	24
Mississippi	33	59	113	352	33	0	0	19
Louisiana	21	28	78	222	4	3	2	9
<b>Cotton States</b>	185	226	474	1693	134	45	22	124
Other Southern	490	757	1,143	3,450	294	53	110	308
Southern	675	1,051	1,617	5,143	428	116	132	432
Eastern	1954	1,455	1,783	2,715	1,128	336	439	786
New England	1,084	1,114	1,108	1,080	512	513	524	578
Western	359	1,503	1,648	4,331	309	577	106	185
Middle Western	2,285	2,664	3,732	7,709	1,356	971	980	2,023
Pacific	175	414	490	1,481	103	103	98	275
Non Southern	5,857	7,150	8,761	17,316	3,408	2,500	2,147	3,847
<b>United States<sup>c</sup></b>	6,532	8,201	10,378	22,450	3,836	2,616	2,279	4,279

Source: Statistics for the United States 1867-1909, compiled by A. Piatt Andrew, National Monetary Commission, Washington, 1910, Tables 4 and 7.

<sup>a</sup> Includes national, state, savings, and private banks and trust companies.

<sup>b</sup> Banks of all sorts minus national and state banks.

<sup>c</sup> The United States do not include the island possessions.

Table 2: Number of Inhabitants to Each Bank

States	Banks of all Sorts <sup>a</sup>				Small Banks <sup>b</sup>			
	1880	1890	1900	1909	1880	1890	1900	1909
South Carolina	39,823	23,022	24,820	5,553	76,583	71,944	121,844	39,748
Georgia	21,720	19,971	12,244	4,463	26,588	91,867	246,240	75,215
Alabama	36,071	32,191	38,097	7,709	48,557	252,163	—	88,011
Mississippi	34,290	21,857	13,728	5,076	34,290	—	—	94,040
Louisiana	44,759	39,945	17,713	7,289	234,985	372,820	690,807	179,795
<b>Cotton States</b>	31,738	25,034	17,548	5,661	43,819	153,543	378,090	77,298
Other Southern	19,133	14,732	12,041	4,609	31,889	215,424	125,117	51,626
<b>Southern States</b>	22,588	17,438	13,655	4,955	35,624	157,991	167,279	58,995
Eastern	6,016	7,919	7,594	7,418	10,421	34,292	38,966	25,623
New England	3,699	4,219	5,046	5,795	7,831	9,162	10,670	10,828
Western	5,452	2,540	3,106	1,555	6,334	6,616	48,290	36,404
Middle Western	6,906	7,296	6,183	3,371	11,637	19,943	23,546	12,846
Pacific	7,964	5,480	6,294	2,461	13,531	22,026	31,470	13,254
Non Southern	5,958	5,828	6,161	3,624	10,239	16,669	25,140	16,315
<b>United States<sup>c</sup></b>	7,678	7,365	7,337	3,943	13,072	22,936	33,372	20,624

Source: Statistics for the United States 1867-1909, *ibid.*.

<sup>a</sup> Includes national, state, savings, and private banks and trust companies.

<sup>b</sup> Banks of all sorts minus national and state banks.

<sup>c</sup> The United States do not include the island possessions.