

**Cooperation Within Anarchy:  
A Case Study of the Success of Commercial Banking  
During the Lebanese Civil War**

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“It is fascinating indeed to find banking and central banking working regularly,  
respecting laws and regulations, and all within a state of anarchy”  
(Badrud-Din, 1984, p. 43)

## **Abstract**

This paper analyses the success of the Lebanese banking system during the Lebanese civil war, which lasted from 1975 until 1989. As the rest of the economy plunged into recession due to intense warfare and governmental collapse, the bankers and their clients continued to cooperate across battle lines in the loaning business. The argument of the paper is that the linkage of social and economic games and the importance of reputation in business created incentives for bankers and businessmen to cooperate in the Prisoner's Dilemma game of lending and borrowing. I challenge the theoretical perspective that cooperation is not possible in a hostile environment in which formal enforcement institutions are inoperative. This case study provides evidence of cooperation under extremely adverse conditions.

## **I. Introduction**

Since the rule of the Phoenicians in 3000 B.C., Lebanon has been a center for trade in the Middle East. Lebanon's success in international and national business can be attributed to its free exchange system, the freedom of movement of capital and earnings within the system, its strong bank secrecy laws, and its democratic political system, rare in the Middle East (Koprulu, 1995). When the Lebanese civil war started in 1975, Lebanon's economy plunged into a severe recession; the court system became dysfunctional, the government divided, and warfare created death tolls of over 62,000 people, 18,000 in the Israeli invasion of 1982 alone (Collelo, 1987). However, the commercial banking sector continued to survive in this anarchic environment. Why did cooperation continue between bankers and their clients and among bankers themselves and how did this cooperation function? In this paper I propose some reasons behind the successful cooperation between the banks and businessmen, focusing on the success of the lending side of the business, the major business activity of the banks. I challenge the theoretical perspective that it is impossible for cooperative exchange to survive in an environment where there are no operative formal enforcement institutions.

I argue that the banks in Lebanon succeeded for two main reasons: 1) the significant role of reputation in business; and 2) the linkage of social relationships, such as family and friendships, with business relationships. An informal enforcement system replaced the formal institutional enforcement system and created incentives for bankers and businessmen to cooperate. I find evidence that banks with a social linkage were more likely to survive during the civil war than banks that had no such linkage. This indicates that not all banks were able to substitute formal enforcement mechanisms with informal ones, once the formal mechanisms broke down.

Surprisingly, little has been written on the topic of the success of the Lebanese banks. The paper that discusses this topic in most detail is that of Clement Henry (1987), in which he presents a similar model to the one presented here. However, he does not use specific bank data to support those ideas; he simply states the situation of those banks. Further, Henry does not consider linked games, one of the main focuses of this paper.

This paper is organized as follows: Section II discusses the model and the role of reputation in banking business; Section III applies this model to the situation of wartime Lebanon; Section IV explains the empirical test; and Section V presents some conclusions and comments about Lebanon's irregularities.

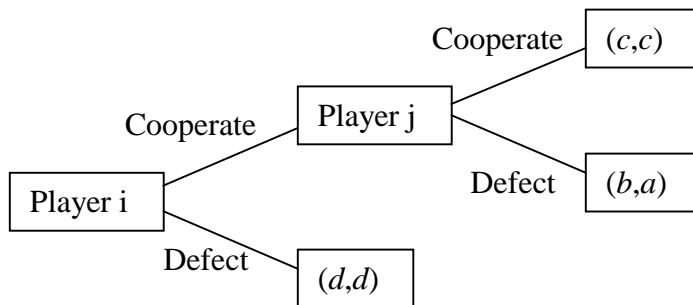
## **II. A Model of Governance – Reputation and Linked Games**

Determining the conditions under which individuals cooperate or defect is central to economic analysis. New Institutional Economists examine the problem of the “governance” of economic relations (Annen, 2001), which Williamson (2001) defines as “the means by which order is accomplished in a relation in which potential conflict threatens to undo or upset opportunities to realize mutual gains” (qtd. in Annen, p. 320). Governance involves formal enforcement systems or informal enforcement systems: the former can include a court system, which enforces cooperation as it allows the possibility for players to punish cheaters for their actions; the latter can involve social capital, “which sustains cooperation between individuals by virtue of mutual inclusions in a social network” (Annen, 2001, p. 320).

Individuals have an incentive to cooperate if they know that they will miss beneficial opportunities for trade in the future by cheating today. The smaller a network is, the more likely this incentive exists since there is a greater chance that others will know that one cheated: “Information transmission [is] facilitated by the relatively small size of the...group” (Grief,

1998, p. 85). Members of a small community speak about the actions of specific individuals, reputations develop, and the spread of this information leads to a collective punishment by the community of the cheater (for example, excluding him/her from the network). Community enforcement and reputation play an important role in business situations involving credit because the lender tends to take into account past actions of an individual in deciding whether or not to give credit. If an individual does not pay back a loan, and the community spreads that information, then that individual's reputation is ruined and he/she loses the opportunity to engage in further borrowing activities in the future.

The problem with creating a governance system with enforcement mechanisms is that people are opportunistic; acting in their self-interest might lead them to cheat. The governance system needs to create a setting in which people have incentives not to cheat. The problem can be illustrated by a one-sided Prisoner's dilemma game:



Each player has two choices: to cooperate (C) or to defect (D). The payoffs are as follows:  $a > c > d > b$  where  $2c \geq a + b$ . The discount factor for each of the two players is the same:  $\delta \in (0,1)$ .

A high  $\delta$  reflects high valuation of a benefit an individual expects to obtain in the future. In a game, cooperation (C, C) will only be self-enforcing if  $c/(1-\delta) \geq a + \delta d/(1-\delta)$ .

A game will yield positive enforcing power,  $P$ , if

$$P = \frac{(c-a) + \delta(a-d)}{1-\delta} > 0$$

where  $P$  is an increasing function of  $\delta$  and  $c$  and a decreasing function of  $a$  and  $d$ . The gains from cooperation are greater than the gains from defection; hence people cooperate.

Now let us consider two types of games, the social and the economic game:  $t \in \{s, e\}$ . Let  $P_e$  and  $P_s$  denote the positive enforcing power in the economic game and the social game respectively. In the social game if one defects, the loss to that player could be loss of a friend, or estrangement from one's family. A loss in an economic game could be loss of future business opportunities with a certain company or simply loss of money in the previous transaction.

When social and economic games are linked, the players will examine the consequences of their actions in each of the games in order to determine which action to pursue. If one defects, one is punished in two ways: 1) that individual is given a negative reputation as a bad person, brother, friend, etc; and 2) that person is excluded from future business transactions (Annen, 2001). In the linked games, "cooperation is self-enforcing if and only if  $P_s + P_e \geq 0$ ...[and] this condition may hold even if one of the two games is not self-enforcing (for instance,  $P_e < 0$ )" (Annen, 2001, p. 321). Social capital then can be defined as positive enforcing power,  $P_s$ , and when the social and economic games are linked,  $P_s$  is transferable to the economic game.

### **III. The Case of Lebanon: Governance in Wartime**

In the case of Lebanon during its civil war, formal enforcement institutions deteriorated as much of the institutional infrastructure had been demolished. Lebanese GDP fluctuated greatly (see figure 1), the government disintegrated into political factions, and the judicial system "just about collapsed...became inoperative" (K., Karjawally, pers. comm., October 1, 2001). Debt mounted over the war years as the government continued to provide goods and services, pay government employees, and support the Lebanese army, without collecting the taxes to fund these expenditures. Amer Bisat and Mohamad L. Hammour (1993) explain:

The government had to bear the burden of paying its unproductive employees, providing unpaid-for electricity and telephone service, and subsidizing fuel, bread, and credit for various sectors of the economy, while its capacity to raise revenue was breaking down. Militia-controlled harbors, smuggling, and the mere incapacity to tax stripped the state of its major sources of revenue. Estimated tax revenue decreased from 39% in 1980 to 9% in 1986 and 2% in 1989” (p. 169).

In addition, there was significant physical damage due to warfare; the Israeli invasion in 1982 alone caused at least two billion dollars in damage to physical property (Bisat & Hammour, 1993). As is usually the case, the unpredictability of the war shortened the time horizon in business relationships such that the discount factor and the economic positive enforcing power ( $P_e$ ) were not high enough to sustain cooperation. Formal enforcement institutions were inoperative, hence the incentives for cooperation were low and a substitute was necessary to induce this cooperation between bankers and businessmen and, thus, for banking to survive. The substitute was, 1) the linkage of the social and economic games because the value placed on the future was higher in the social relationships than that of business relationships, and 2) the significant role of reputation.

The banks’ major business activity was the distribution of short- and medium-term loans to businessmen; the amounts of these loans were based on the quantity of collateral a client could provide. In this business, banks’ major decisions concerned whether to loan money to a businessman, and if so, the amount of the loan. These decisions were based on social relationships and personal experience; thus the economic game was linked to the social game. As one leading banker explained, “Credit was a function of trust and friendship, not of protected cash flows based on tenuous, primarily political assumptions” (qtd. in Henry 207). Banks and businesses were mainly family-owned; thus these families would do businesses together on the basis of the trust families and friends have between each other (N. Barbar, pers. comm., 9 November 2001).

Even when the actors did not know each other, personal connections between family and friends would be determined to facilitate business. As Suad Joseph (1990) describes, “Strangers, connected through mutually known primary relationships, temporarily addressed each other as siblings, cousins, or the like. The stranger, then, could be asked to carry out the moral obligations of the primary relationship” (p. 144). For example, Sami Kalash, a businessman from Saida, Lebanon, wanted to apply for a loan for his fruit business during the war. His brother, Mahmoud Kalash knew a banker at BLOM bank in Beirut through past transactions with the bank; hence, Sami asked Mahmoud to accompany him when he went to the bank to apply for the loan. Mahmoud greeted the banker as “brother” and introduced his brother Sami. After an hour long meeting involving coffee, an extensive exchange about their respective families, and finally discussion about business and the reason for Sami’s visit, the banker granted the loan. The banker then addressed Sami as “brother,” as he had addressed Mahmoud, and the meeting ended. In an interview with Mahmoud, he stated that during the war, without a connection to a banker, it was very hard to take out a loan (Mahmoud, pers. comm., November 16, 2001).

The linkage of the social and economic games is evident. Businessmen and bankers were friends and family members; thus if a businessman defaulted on a loan, then that person would be estranged from the bankers’ family, perhaps isolated by his own family, and certainly unable to do business with that bank in the future.

In addition to the importance of the linked games in banking business, the banks succeeded during the war because of the involvement of reputation in practicing business. Bankers within Lebanon confirm the importance of the exchange of reputation information among bankers about borrowers before the loans were granted. Nofal Barbar (2001), current Executing Vice President Regional manager of the Arab Bank, explains,

Bankers did business with people known for their standing in the business community and financial strength. Lebanon is a very small country. People know each other[;] they know who has what. This is the best safety for bankers. They don't depend just on financial statements like we do here. If they didn't know the person they [would] ask other bankers, neighbors, associates, mosques, churches. If someone defaults on one bank it gets around very quickly and that person is shut out by all banks (Pers. comm., October 9, 2001).

As Barbar explained, reputation information was easily obtainable since members of the community spread this information quickly. The bankers and their clients knew that having a positive reputation was important in the long run: "Bankers relied on good faith and trust to collect their money, knowing that one day the war would end, and that the [parties involved] would need each other to resume their normal business operations" (K. Karjawally, pers. comm., October 1, 2001). The high value placed on the future meant that the discount factor,  $\delta$ , was high in the social game. Mr. Khoder Mneimneh, manager of BLOM Bank, emphasizes this point by stating that most loans were repaid because the potential long-run loss of defaulting seemed to outweigh the short-term gains (M. Kalash, pers. comm., November 16, 2001). The high  $\delta$  induced cooperation in both the economic and social games as they were linked. If a businessman cheated on a loan in this society, then that businessman would be estranged from the banker's family and perhaps his own family as punishment in the social game. As a result of the linkage of the social and economic game, information about his cheating would be spread by the community and his reputation smeared, and so he would be punished in the economic game by not being trusted by other bankers and businessmen in the future.

In summary, the importance of keeping a positive reputation in the future created a high enough discount factor in the social game to induce cooperation and thus raise positive social enforcing power. The linkage of the social and economic games meant that this high discount factor could compensate for the low discount factor of the economic game (due to war

conditions) and so cooperation continued throughout the war. Barbar explains further that banking continued to function even across religious and political lines because there were incentives to cooperate (N. Barbar, pers. comm., November 9, 2001; N. Barbar, pers. comm., October 9, 2001). Henry (1987) gives the example of the “big syndicated loan for a cement works at Sibline, near the Shouf mountain strongholds of the Druze...Lebanon’s leading Christian- and Sunni-owned banks participated in Druze chieftain Walid Jumblatt’s project, whereas the major Druze-owned bank did not” (p. 211).

#### **IV. Comparative Analysis**

A comparative study that examines the types of banks that did and did not remain in business during the war can provide evidence to my argument. I hypothesize that those banks that closed their offices did not have a significant connection to the society. Finding that mostly foreign banks left would sufficiently support my hypothesis. First, I should mention two caveats: 1) Due to the war conditions, there is very little data available, such as bank deposits, amount of employees per bank, market share numbers, or loan portfolio amounts to show sizes of the banks; and 2) The foreign and Lebanese banks existed in the same environment, thus environmental factors such as the low GDP or the amount of warfare are assumed to affect each equally. I adjusted the numbers for those banks which merged over the years of the war to eliminate that interference.

It seems that when formal enforcement institutions crumbled as a result of the war, the banks that failed were mainly foreign banks as opposed to Lebanese banks (see figure 2). The foreign bankers, especially the managers, were not involved in the Lebanese community to the extent to which the Lebanese bankers were; hence during the war, they were unable to survive in the informal enforcement environment. As Henry (1987) explains, “the Lebanese-owned

banks...having greater confidence, perhaps, in their borrowers, were more willing to become prisoners” (p. 209) in the Prisoner’s Dilemma game of banking. Lebanese bankers of Bank Audi, for example, were already family members or friends of their business clients, whereas the bankers from foreign banks had a harder time forming these relationships due to the politics of the war. The reputations of the foreign banks, especially the American ones, suffered from the political situation. As foreign and Lebanese bankers have explained to me in interviews, the kidnappings of multiple American bankers influenced most of the American and European banks to sell their branches to Lebanese banks believing they could do better business in that environment. Henry (1987) stated that, “Foreign Banks, especially big U.S. multinationals, were among the first to cut their loan portfolios, while Lebanese owned banks took over many of the former prime Lebanese customers’ loans (and corresponding deposits)” (p. 209). Figure 3 shows the number of foreign banks that left by region.

One might argue that more Lebanese banks remained than foreign banks throughout the war because the Lebanese banks had better survival capacity as a result of their smaller size. Due to the unavailability of data that would show sizes of the banks in Lebanon, foreign and Lebanese, I am unable to completely refute this argument. However, as a result of my research of the banks, it seems that the foreign banks sold their branches to the Lebanese banks because they believed that the Lebanese bankers were better suited to do loan business in the war environment. This, I posit, was due to the connection the Lebanese bankers had with the Lebanese people and, thus, allowed them to retain positive reputations and businessmen to cooperate with the bankers in the linked social and economic games of banking.

During the war, the six Lebanese banks that closed did so as a result of bad management (M. Kalash, 3 Dec. 2001). Some had given out more loans than they could cover with assets;

some managers stole the money and fled the country (M. Kalash, 3 Dec. 2001; Collelo, 1987). In spite of the defection of the managers of these failed banks, the banking system did not break down due to the work of the Central Bank, rather than help from the government.<sup>1</sup> It played a large role in rescuing certain Lebanese banks from collapse due to poor management and in keeping the ailing family-owned banks from failing (Henry, 1987). For example, the manager of First Phoenician granted fraudulent loans financed in part by inter-bank deposits at high interest rates in March 1984 and then fled to Brazil. As Henry explains simply, “The central bank rescued the depositors and put the bank under new management” (Henry, 1987, p. 211).

## **V. Conclusions and Lebanon’s Irregularities**

Examining bank numbers during the war, we find that evidence exists that supports the argument that bankers and businessmen in Lebanon cooperated in the prisoner’s dilemma game of banking during the civil war because of the linkage of the social and economic game and the importance of reputation in business. However, what makes Lebanon’s banking situation different from other countries, specifically those which are not at war yet have no cooperation in the banking sector? Clearly, the difference lies in the informal enforcement system. Often in other countries politicians create formal institutions of enforcement and regulations to prevent cheating in the system, without creating an incentive structure that promotes cooperation. For example, in Colombia, a country which was proceeding through an economic downturn at the same time as Lebanon’s civil war, the government took control of many of the banks and “much of the long-term credit for mortgages and business investment had to be secured through the central bank or any one of the many government-operated development funds” (Hanratty & Meditz, 1988). In contrast, in Lebanon the informal system had always enforced cooperation

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<sup>1</sup> Badrud-din (1984) states, “The Bank of Lebanon is a state-owned but financially autonomous legal entity. It is not subject to the administrative and management rules and controls applicable to public institutions” (74).

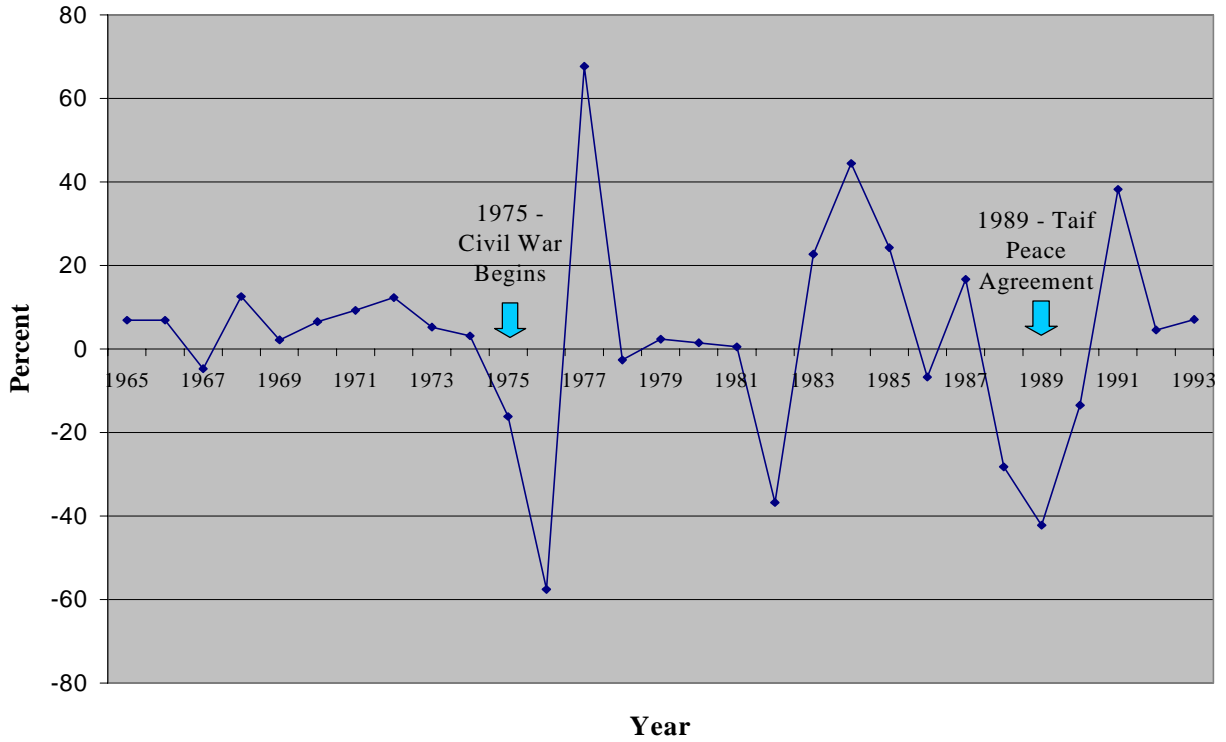
before any formal system. The small size of the country and the fast spread of information about those involved in business and banking caused reputation to grow in importance and prevented individuals from cheating. The linked social and economic games led bankers and businessmen to cooperate even when the economic  $\delta$  was low since the social  $\delta$  was high.<sup>2</sup> In addition, the Central Bank had instituted very few regulations over the war years unlike Colombia and other countries that stress the importance of regulations. In Lebanon, the Lebanese banks succeeded with relatively little government aid; only a few banks received aid from the Central Bank in specific cases in which banks had management problems. The incentive structure functioned, and so cooperation ensued, in an environment with inoperative formal institutions.

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<sup>2</sup> See page 4 for discussion of  $\delta$ .

**Figure 1:**

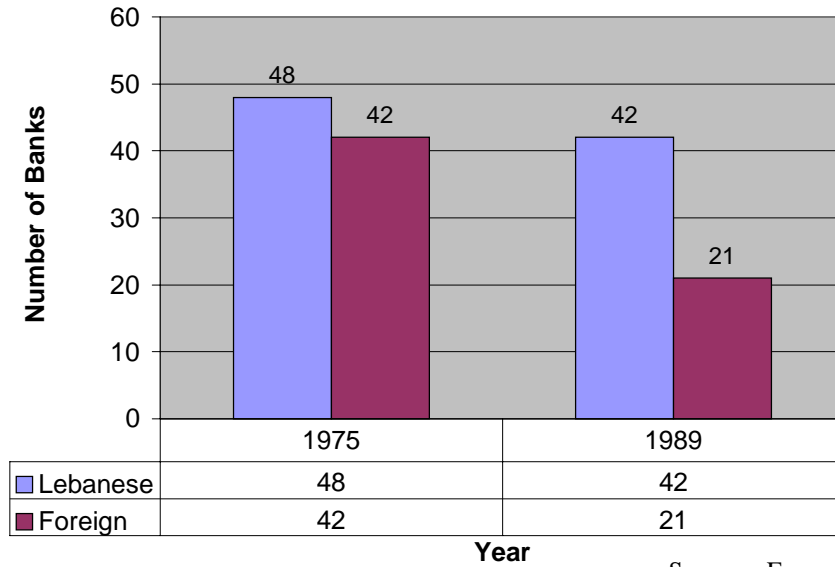
**Real GDP Growth in Lebanon (in percent)**



Source: Eken, Cashin, et. al.,  
1995.

**Figure 2:**

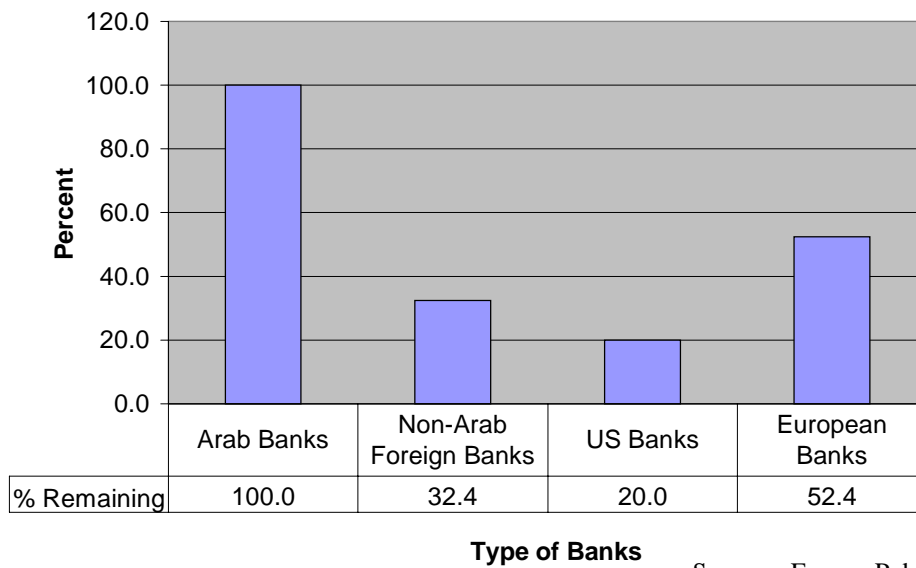
**Number of Banks in 1975 and 1989 in Lebanon**



Sources: Europa Publications, 1975-1989; Association des Banques Du Liban (ABL), 2000.

**Figure 3:<sup>3</sup>**

**Percentages of Foreign Banks Remaining in Lebanon in 1989 from 1974**



Sources: Europa Publications, 1975-1989; ABL, 2000

<sup>3</sup> Interestingly, all of the Arab banks working in 1974 in Lebanon remained in business throughout the war. Perhaps because their bankers were similar in background to the Lebanese, they held reputations that could not be easily tarnished by political controversies.

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