to him merely a necessary step in a greater game—and a sop to his aristocratic backers. Once his target price for Mississippi shares was achieved, Law planned to bring the orgy of speculation under control.

This view of events brushes too lightly over fundamental flaws in Law's thinking, however. For all his desire to emulate the mercantile republics, Law never seems to have understood that low and stable interest rates cannot be created through speculation. For the reduction of borrowing costs, like the colonization of a wilderness, "is a Work of time, and must take up not many Years only, but ages of Years." Public creditors will accept a long-term yield of 3% or less only when (inter alia) they have developed a profound confidence in the government's ability and willingness (1) to honor its debts under all circumstances, and (2) to maintain long-term monetary stability. There was nothing in the history of the ancien régime to make investors anything other than deeply skeptical on both these points.

With his profound (yet imperfect) understanding of the powers of credit creation and of the psychology of speculation, Law was able to create a boom that temporarily lowered interest rates to his desired target, but he was able to do so only by a vast increase in the total money supply that, in itself, negated any chance of fulfilling the second prerequisite of long-term stability. Under this shower of paper money, which fell on Parisians like ticker tape, prices rose by three times before the return of the old guard brought about a deflation more severe and prolonged than any in French history. In this sense the seeds of the destruction of the System were sown at its very beginning. Richard Cantillon, the expatriate Irish banker, speculator, and economist, saw the inevitability of the eventual collapse and sold out at around 2,250 in August 1719. Of course, he sold far too early and missed the great rise of the autumn. But his reasoning was impeccable. He observed how Law had expanded the note issue of the Banque Royale in June and July in order to accommodate the second and third share issues. From this expansion alone, Cantillon deduced the unsustainable nature of Law's project.[36]

But there was an even more profound defect in Law's political vision. He understood that France needed to copy the mercantile republics if it was to compete in the new era of public borrowing. His vision of the Mississippi Company was based on the Casa di San Giorgio of Genoa. He failed to grasp, however, that it was not sufficient to convert the French public creditors into passive shareholders in his grand design. San Giorgio (and effectively the Genoese state) was entirely controlled and run by its

citizen shareholders. Under Law's scheme, political power was centered more firmly than ever on Versailles. The French court held a controlling interest in the Mississippi Company, and the French state owned all the shares of the Banque Royale. The extinction of the officeholder and the *financier* class removed one of the few remaining restrictions on royal absolutism. Law may have admired the financial strength of the mercantile republics, but just how far he was from grasping the political basis of this strength is shown by the following passage from one of his memoranda:

> In credit, just as in military or legislative power, it is necessary that the supreme power reside in a single person and that all subsidiary powers are united in it, because the secret, the obedience, the expediency, the order and the union so necessary in the administration of the State depend on the unity of a single will. The credit of all the members of this State, united in the single person of the prince is infinitely stronger and more sound than that which depends on a multitude of disparate individuals.[37]

Law thought that France could have a financial revolution and not a political one. He did not understand that, in the end, the two were inseparable.

THE BUBBLE

The Mississippi scheme was at least redeemed by a grandiose, if untenable, economic vision. The same cannot be said of the reaction that it provoked across the Channel.

After 1715 Englishmen had taken to congratulating themselves on the intrinsic superiority of their public finances. In late 1719, the anonymous author of *The Chimera: Or the French Way of Paying National Debts, Laid Open,* summed up the prevailing view:

> It was many years ago since the French Court regretted very much the height of the Publick Credit in England, they looked upon it as the Great, and perhaps the only Advantage that England had over them in the War. . . . No superiority in the Field, could be a Match for this superiority of Treasure; for Money being the Basis of the War, in the Modern way of carrying such things on in the World, it had long since been a receiv'd Maxim in the Case of War, that the longest Purse, not the longest Sword, would be sure to Conquer at last. . . .
>
> It was in vain that the late King of France, tho' he had an Absolute Command of the Greatest, and at first the Wealthiest Nation in the World, tryed all the Methods, all the Arts that human Wit could Invent to raise a Fund of Credit

> in his Kingdom. . . . This coy Mistress, call'd Credit, could never be woo'd; the more he follow'd her, the faster she fled from him, and he had the continual Mortification to see his National Credit fall. . . .
>
> Our Credit here grew daily, and at last encreased to such a height, that from paying Twelve and Fourteen per Cent for Money, and struggling to get it brought in, we came to reducing the Interest from Six per Cent to Five per Cent, and now have the publick Command of what Money they pleased at Four per Cent.

But now, to his horror, an expatriate Scotsman—a prophet without honor in his own home—had suddenly turned the entire situation upside down:

> But Fate and the Fortune of France has now turned the tables on us. . . . And thus in a moment their Debts are all vanish'd, the substance is answer'd by the Shadow; and the People of France are made the Instruments of putting the cheat upon themselves . . . transposing the Debts from the King to themselves, and, being contented to Discharge the Publick, owe the Money to one another.

Yet, as far as our writer was concerned, there was no question of copying the French "chimera":

> And thus for once in the World, Tyranny has the whip-hand of Liberty; for nothing can be done in England like this, even the Parliament itself is limited, and there are the redeemable and unredeemable Funds, the last of which are a Burthen, nothing but the Number *Ninety Nine* (Years) can put an end to. . . .
>
> Let no Man mistake me here, as if I were bewailing the Incumbrances of National Privileges, and suggesting that it was a pity we should be a Nation of Liberty with such a Burthen of Debt; on the other hand, let us be, say I, a free Nation deep in Debt, rather than a Nation of Slaves Owing nothing. . . .
>
> . . . The Goodness of the Publick Credit in England, is the reason why we shall never be out of Debt; for where is the Man that, having lent his Money on the Credit of Parliamentary Security, will upon a whim, Discharge that Fund and take a precarious Company of Private Men for the Money?[38]

Brave words; and in some ways an astute analysis. But unfortunately, there were only too many public creditors ready to exchange their parliamentary security for the "precarious Company of Private Men."

Like the Mississippi Company, the South Sea Company is most famous for the speculative stock exchange bubble associated with its name. But underlying this timeless example of crowd psychology lay a struggle for control of the financial affairs of the country that is often forgotten. Fortunately, the South Sea Company went under, and the Bank of England survived. What would have happened had events turned out otherwise is

impossible to state with precision; but given the unscrupulousness and shallowness of vision displayed by the principals of the company, it is unlikely that the political and financial stability of the country would have been improved.

It is not at all surprising that the directors of the South Sea Company drew inspiration from the experiments of John Law. After all, it was the South Sea Company that had provided the model for the flotation of the Mississippi Company, a vehicle to permit the government to change short-term into long-term debt by adding the lure of trading profits to the basic interest income. After their initial flotations, the shares of both companies had languished, since the hoped-for profits singularly failed to materialize. In one respect there was, perhaps, a fundamental difference between the two companies. The French company did have some real, if long-term, prospects. The English company had almost none. It had been founded on the illusion that Spain could be induced, as part of the peace settlement at the end of the war, to open up its highly lucrative monopoly of trade with its American empire. Yet the final treaty disappointed on this score. Apart from one slave ship per year, no trade was conceded. Indeed, it is hard to see how any Spanish regime could have done otherwise than to protect its monopoly to the death. It was, after all, still the government's major financial asset—perhaps more important than ever, given the drastic decline of the domestic economy. Daniel Defoe put the matter succinctly:

> Unless the Spaniards are to be divested of common sense . . . throwing way the only valuable stake they have left in the world, and in short, bent on their own ruin, we cannot suggest that they will ever part with so valuable, indeed so estimable a jewel, as the exclusive power of trade to their own plantations.[39]

As it turned out, the South Sea Company was never to garner any significant income from its international trade. The opening of the South American market had to wait for the overthrow of the Spanish Empire (with British support) one hundred years later. By that stage, the era of the great chartered companies was over, and the era of "free trade" had begun. It is true that by 1719 the share price of the South Sea Company had risen from its early level of 70 to 100 or better. This was not the result of increased profits, but merely of declining interest rates in England. Even when the yield on its government annuities was reduced from 6% to 5%, the price continued to rise over par. By 1718–1719, it was stable in the region of 116, giving a yield of 4.3%—more or less in line with other government rates.

The directors of the company were ambitious men who were scarcely to be satisfied with such a situation. They came originally from the Sword Blade Bank, a Tory-controlled institution that had long sought to take the place of the Whig-controlled Bank of England. The South Sea Company had been founded by the Tories to overturn the Bank of England's increasing monopoly on government funding. Indeed, it is unlikely that its promoters ever considered the South Sea trade anything but a springboard for their wider financial ambitions. But much to their irritation, after the initial success of the South Sea flotation, the Bank had resumed its progress. Harley's later lottery loans had been managed by the Bank, and it was now responsible for the redeemable 5%s which had been issued to refund them. By 1719 the Bank was responsible for managing almost the entire short-term debt, as well as £16.5 million of redeemables and its own £3.4 million perpetual annuities. All this was in addition to its profitable private banking business. By contrast, the South Sea Company was little more than a passive holding company for £9.2 million of perpetual annuities. After 1718, England was at war with Spain, and such meager trade as had hitherto taken place halted entirely. The events of 1719 in France may have come as a very unwelcome surprise to most in England, but to the directors of the South Sea Company they were a source of inspiration. If they could employ some of John Law's tactics to alleviate the burden of the English public debt, they might finally oust the Bank of England from its stronghold.

The conundrum for any such undertaking was how to persuade the holders of the irredeemable debt to surrender their privileges. It was this problem that had defeated Walpole in 1717. What the directors of the South Sea Company now grasped was that, with the shares of the Mississippi Company doubled in price since the autumn, most French rentiers had made considerable capital gains. Whatever skepticism many in England professed about the underlying prospects of the Mississippi Company, the spirit of speculation was infectious. Never before had there been a better time to propose the South Sea Company as a vehicle for tempting the holders of the irredeemables to surrender their stock.

There was also a political opening. The events of 1715 had ruined the Tory Party, which until then had constituted the natural majority within Parliament. Its leader, Bolingbroke, had been in secret negotiations with the Old Pretender (James Edward Stuart) and had fled abroad at the arrival of George I. All Tories were suddenly tarred with the brush of treason; and for a party that prided itself on loyalty to the crown above all things, this was a death knell. Party members with an eye for self-preservation rapidly changed allegiance; and none had a keener sense of self-preservation than the directors of the South Sea Company. But, of course, none of this altered the old personal and institutional rivalries. In late 1717, the pure Whig government, in which Robert Walpole had been Chancellor of the Exchequer, fell out of favor. The new administration under the Earl of Sunderland installed John Aislabie as chancellor. Aislabie was a converted Tory from Harley's day whose views were far more favorable to the interests of his old party friends. In many ways the events of 1720 were the final opening for the erstwhile Tories to prove themselves capable of beating the Whigs at their own game.

The leaders of the scheme were a small group of directors and officers of the South Sea Company and the Sword Blade Bank, which was familiarly referred to as the Junto. At the very center of this cabal were Sir John Blunt, the founder of the company, and Robert Knight, its secretary. Blunt was now a member of Parliament and a well-known figure. Knight was less well-known, but no less important,

> a man of exceptional abilities, unlimited ambition and complete lack of scruple. . . . History has been slow to recognize him as a central figure. . . . But when the ruins of the scheme were examined, he was found to have made more out of it than anybody else. . . . Blunt provided cunning, bluster and technical draftsmanship, but Knight's was the power of innovation, charm and ingenuity that made the thing possible, and these he shared with Law, whom we now know to have been his close acquaintance, if not his friend.[40]

Knight may have been a close acquaintance of John Law, but to compare the two men is certainly to insult the Scotsman. Indeed, Law, with his capacious political and macroeconomic vision, understood that his plan was entirely inappropriate for England. France was in the depths of an economic depression and could easily handle (or so he thought) a strong dose of monetary stimulus. In addition, France required a radical change in its methods of public finance if it was to compete with the new Anglo-Dutch axis. By contrast, in 1719, England was enjoying an economic boom, which was already in danger of overheating. There could be no justification for the kind of credit boom that the Junto was to copy from Law's operations in France. Besides, England had already more or less completed its financial revolution. The irredeemable annuities were, from a long-term perspective, merely a minor inconvenience. The country had no need for wild debt-conversion schemes.

Throughout the second half of 1719, the Junto and the government min-

isters were in secret discussions. But although some rumors were in the air, when Aislabie announced in Parliament on January 21, 1720, that the South Sea Company was preparing a proposal to take over the entire national debt on favorable terms, his announcement was received in stunned silence. Some backbench enemies of the company proposed that the Bank of England should be invited to present a plan as well. This suggestion was little to the liking of the government, but they were forced to accede. As a result, on January 27, Parliament was presented with not one, but two proposals for refunding the entire £31.6 million of public debt not held by the chartered companies:

> The Corporation of the Gouvernour and Company of Marchants of Great Britain trading to the South-Seas and other Parts of America, and for Encouraging the Fishery, having under their Consideration how they may be most serviceable to His Majesty and His Government; and to shew their Zeal and Readiness to concur in the Great and Honourable Design of Reducing the National Debts.[41]

The South Sea Company's proposal was couched in roseate prose; the Bank's was rather more businesslike in presentation. But their substance was largely similar. Undoubtedly the Bank, which had been caught quite unawares, was merely concerned to outdo its rival at its own game. Both corporations proposed to exchange the debts in the hands of the public for their own shares. Both offered to cancel the debts thus exchanged for perpetual redeemable annuities paying 5%. Both sought authorization to issue shares with a nominal value equal to the debts exchanged. Most critically, neither specified the number of shares it would offer the debtholders. Because both their stocks were selling above par, they would be able to satisfy the debtholders with less than the total amount of shares authorized. The rest could therefore be sold in the market for cash.

This was the true excitement. The exchange of nonredeemable for redeemable debt was already a substantial benefit, which would lead to significant future interest savings. But both companies also offered a cash bonus to the state, which would derive from their ability to sell their excess shares in the market. The South Sea Company offered £3.5 million. The Bank offered up to £5.55 million, depending on the amount of debt exchanged. It was able to offer more than its rival for the simple reason that its shares were selling at around 150, whereas the South Sea shares were trading at no more than 130. It would therefore be able to satisfy the debtholders with fewer shares and have more left over to sell in the market. The Bank's offer had another advantage for the state. It proposed that each

£100 of ninety-nine-year annuities that it failed to bring in would automatically cancel double that amount in newly authorized stock. This would make it virtually impossible for the Bank to go ahead without exchanging the irredeemables, which was, after all, the original object of the exercise. The South Sea Company offered no such guarantee.

The Bank had delivered a very sharp setback to its enemy. But neither the Junto nor its allies in the government were about to surrender. Indeed, the inclusion of the cash offers to the state had made this a fight to the death. The money collected by the government could be used as a threat to force the redeemable annuity holders to convert or face redemption. If not needed for that purpose, the money could be used to redeem other debts—including the annuities held by the losing bidder. Both sides risked seeing the other end up with control of the very large majority of the national debt and themselves reduced to virtual insignificance. To make the stakes even plainer, the South Sea Company included an offer to underwrite £1 million of Exchequer bills free of charge—a direct challenge to the Bank's monopoly of this business.

A further round in this extraordinary auction of the national debt was ordered by the government. On February 1, the parties presented revised bids. The South Sea Company put its finger on the moving spirit of the times by focusing its improvements on the cash kickback. This was raised to £4 million fixed, plus a further amount of up to £3.57 million, depending on the number of the ninety-nine-year annuities exchanged. The state now stood to gain £7.57 million, or around 15% of the entire debt. In order to give some guarantee on the conversion of the irredeemables, the company offered to pay the equivalent of one year's interest for each amount not exchanged.

If the South Sea Company's second offer was far more daring than its first; the Bank's second offer was, if anything, more cautious. The cash offer to the state was slightly raised to £5.67 million, but unlike the South Sea offering, it remained entirely dependent on the number of annuities exchanged. More critically, the Bank now specified the number of shares it would offer to the various classes of creditors. For the £31.6 million of exchangeable debts, the Bank would give £26.9 million new shares (at nominal value). This would leave £4.7 million shares to be sold to the public. These were generous terms, which gave a reasonable assurance of success to the whole scheme. The break-even point was around 121—a price that would produce enough cash for the government's *douceur* and leave debtholders with shares worth no less than their old securities. Although

the cash payment to the government would tend to dilute the share price, it is unlikely that it would have fallen this far. At a price of 130 the shares would still have yielded around 4%. Although this would have been a fall of 20 points from the price prevailing before the exchange, it would still have made sense to the Bank's directors. Their action was largely defensive, and it was far better to dilute the Bank's profitable banking monopoly by the addition of vast numbers of new shareholders than to risk the victory of its rival.

The South Sea Company's offer finished off with a plea for preference and an offer to match any other offer,

> flattering themselves that the Readiness and Cheerfulness that engaged them so much earlier than any other Society, to endeavour to reduce the great Debt under which this Nation is Oppressed, will Intitle them to the favour and preference of this House, since they are willing and do hereby declare they are ready to undertake this great work upon whatever Terms may be offered by another Company.[42]

They need not have bothered. Parliament paid scant attention to the details of the Bank's offer and focused entirely on the big figure of £7.5 million. Of course, there were many public creditors in Parliament, but the larger majority still consisted of the same country squires that had supported Harley in 1710. The country members had little understanding of the intricacies of finance, but they did understand that high public debt meant high taxes. Any offer that promised to reduce the land and excise taxes had their support, and the South Sea Company's offer seemed the most generous. They also had a deep and enduring suspicion of the Bank. There was not even a long debate on the issue: the South Sea Company's offer was carried by acclamation.

The next day South Sea stock rose to 160 and beyond, while Bank stock fell sharply. Everyone agreed that the Bank's era was over. This was not quite the end of the issue, however. An act of Parliament had to be drafted and given the formal approval of the Commons, the Lords, and the king. This was not ready until March 23, and the Bank and its allies fought a rearguard action. Their method of attack was to demand that the South Sea Company specify the terms of its offer to the debtholders—something that the company resolutely refused to do. The reason it refused goes to the heart of the debacle that was about to occur.

First, it is necessary to understand that there was no obvious reason why shares of the new megacompany should have a significantly different value, whichever of the two contenders won. The government would pay 5% on a capital of £31.6 million to either successful bidder. This income of £1.58 million would be added to the existing annuity income of the winner (also at 5%). The revenues of the successful bidder from its holdings of public debt were therefore quite predictable and would dwarf any other sources of income that it might have. True, the Bank had a slight advantage because of the profits from its banking business; but these profits would be totally insignificant compared to its interest income from the government.

The Bank, with considerable shrewdness, had pitched its bid at the highest possible level compatible with good sense. It had left itself just enough leeway to sell the residual shares at a price that reflected the likely long-term value of the enlarged company. By offering £2 million more, the directors of the South Sea Company had thrown caution to the winds. If they offered the public debtholders the same number of shares as the Bank, they would be left with the unenviable prospect of having to sell the residual shares at just over 161 in order to fund their obligations to the government. Yet who would buy them, when the underlying value of the company was unlikely to be more than 125?[43]

Of course, the directors of the South Sea Company were not about to allow themselves to be cornered into matching the Bank's offer—whatever the rhetoric of their second proposal. It would have been the end of their bid, and both they and the Bank's supporters knew it. The next weeks witnessed some of the most shameless acts of bribery in the history of Britain. Robert Knight opened a "green book" in which he recorded allocations of shares (shares that were not yet issued and did not have to be paid for until later) to those in high places. The Earl of Sunderland, the leader of the government, received £50,000 at a price of 175. Chancellor Aislabie received £20,000 at 170. Secretary of State Craggs was put down for £30,000 at 175. Twenty-seven members of Parliament "bought" £81,000. Six peers of the realm divided £38,000 between them. And to round matters off, the Duchess of Kendall—the king's mistress—and her two daughters were granted £12,000 each at a price of 154. Whether some also went directly to the king and the Prince of Wales is not known, but certainly not unlikely. The in-built profit on these shares was £400,000 at the time of issue.[44]

The debate in the Commons on March 23 lasted six hours. All the heavyweights were there. Sound financial minds such as Robert Walpole and Archibald Hutcheson led the opposition, but to no avail. The spirit of speculation had already taken hold. In vain, they warned that the current

price of the South Sea stock—which fluctuated feverishly between 270 and 380 during the debate—bore no relation to underlying values:[45]

> If the truth be, as I verily believe it is, that there is no Foundation for the present, much less the further expected, high Price of South Sea Stock, and that the Frenzy which now reigns, can be of no long Continuance . . . is not the Duty of a British Senate to take all necessary Precautions, to prevent the Ruin of many Thousands of Families?[46]

An amendment was tabled to force the company to fix the terms of its exchange offer. Chancellor Aislabie endlessly repeated the party line that, if the offer were fixed, the price of the company's stock would fall and endanger the entire operation. Of course, this was true. In the absence of a valid financial justification for the South Sea exchange, the only incentive could be the possibility of speculative gains such as those enjoyed by the shareholders of the Mississippi Company. A falling price would soon erode the purely speculative appeal of the South Sea shares and expose the lack of fundamentals. But Parliament did not consider this implication of Aislabie's argument. The completion of the transaction seemed essential for the nation's future; therefore Walpole and his allies were ignored. The amendment was soundly rejected. To rub salt into the Bank's wound, the House voted two days later that all its annuities save the original £1.2 million would be redeemed in the next year.[47]

It is possible that the South Sea directors had originally planned a prudent exchange that might have succeeded. Certainly their original "sweetener" of £3.5 million was quite affordable. Perhaps the bidding competition with the Bank had forced up the ante to a point where the only way to complete the exchange was through a speculative boom. In other words, the company found itself in the same position as John Law when he set the issue price of the Mississippi Company at 5,000 instead of a more realistic 2,500.

Unfortunately, there is no evidence that this theory is correct. The inner ring of South Sea and Sword Blade directors had no grand economic vision such as that which inspired John Law. They were motivated by a desire for power and money. While they probably had little idea of how far the South Sea stock would rise in the heady atmosphere of 1720, they had always planned to have as much free stock as possible to sell at a "profit." Their idea was not to have just enough to satisfy the requirements of the sweetener, but enough to raise a very large amount of cash for the company.

It may seem odd to modern ears that the sale of shares should be viewed

as a "profit" to the existing shareholders; but almost every pamphlet of the time expressed it in this way. Perhaps the world of joint stock companies was still too young for modern accounting principles to have taken root. Perhaps the fact that the cash offers by the company could be considered a "profit" for the public purse misled people into thinking of the entire proceeds of the share sales as a "profit" for the company. Whatever the reason, it was this misconception that was at the center of the general madness that was overtaking the country.

Taken to its illogical extreme, the failure to consider the dilution caused by the new shares issued in exchange for all this cash led to a belief in

> this extraordinary Paradox, *viz.* That the higher the Price is which is given for South-Sea Stock, the greater Benefit the Purchasers have thereby; and that 300 £ per Cent, it is intrinsically Worth 448 £, and at 600 £ is Worth 880 £.

In other words—if the new shares are not taken into account—the higher the share issue price, the greater the amount of cash raised, and the greater the assets per share. This was pure nonsense, and an anonymous MP (almost undoubtedly Archibald Hutcheson) railed against it in an answering pamphlet:

> [Under such reasoning] there is nothing left for the Purchasers of the said remaining Stock [sold to general public] but the Pleasure and Satisfaction of having made a generous Present to the Proprietors of the said United Capital . . . of the immense sum of 61,973,242 £ 13s. If this Computer intended to be understood thus, must he not think that the Purchasers of the remaining Stock . . . will be deprived of all Common Sense and Understanding? But if he intended to make them believe that their Stock would also be worth 448 £ 15s per cent, was there ever such a delusion from the beginning of the World to the 9th of April, 1720?[48]

Allowing for the shares that would be issued to the cash subscribers, the anonymous author recalculated the assets per share at £221 rather £448 and stated tartly that "this, surely is sufficient Gain to the Proprietors of the Old Stock, and sufficient Loss to the Purchasers of the New."

Well, even if this was the greatest "delusion from the beginning of the World to the 9th of April, 1720," it was to be handsomely surpassed by August. One's eye lights immediately on the fantastic sum of nearly £62 million that the company hoped to raise. To put this sum in perspective, it is only necessary to recall that the GNP of Britain at the time is now estimated to have been around £60 million. Yet, in spite of its inherent im-

plausibility, the underlying calculation was simple enough. At a price of 300, £31 million pounds of public debts could be exchanged for only £10.3 million of South Sea shares. This would leave £20.7 million shares to be sold at 300 and hey presto! a value of around £62 million appears.

It is here that the South Sea Bubble most clearly differs from the Mississippi scheme. John Law never raised surplus cash from the public. All the 1.7 billion livres raised by the Mississippi Company went to the government to re-fund its debt (apart from a small portion to buy the right to operate the mint). The value of the Mississippi stock was based on its promise to pay a 4% dividend on the issue price of 5,000 livres—the same yield as the previous interest on the public debt. Even if 4% was hard to achieve in the short term, 3% was more than possible, and if dividends on the shares owned by the crown and the Banque Royale were deferred for at least the first year, the other shareholders could be paid in full. By contrast, the South Sea Company had revenues that would support a dividend of only 1.67% for debtholders who exchanged their annuities at 300. The only argument with even the superficial appearance of logic that could be made on behalf of the exchange was that the cash raised by the company through its issues of new shares would be reinvested in some highly profitable manner to increase this basic income or would perhaps be distributed to shareholders in an enormous dividend. Of course, most debtholders did not make any such calculation but merely acted in the hope of trading out at a profit.

Either way, it is hard not to suspect that the English investors were even more deluded than the French. It was not at 300 that the exchange was made and shares were sold, but at prices far—in some cases, almost unimaginably—higher. On April 14, a first share issue was made—to cash subscribers only—at 300. This served to raise some funds and to stoke up interest in the larger issues later. The bulk of the ninety-nine-year irredeemables were exchanged in the second issue on May 19 at a price of 375, while cash subscribers paid 400. After that, the market really took off, reaching 600 by the end of May and 950 by the end of June. The third subscription, again open only to cash subscribers, was made in June at a price of 1,000. In August, a final issue took place to mop up the redeemables and the remaining irredeemables as well as to raise still more cash. This issue, too, was sold at 1,000. The price of 300 mooted in late March appeared as the distant, and now outmoded, product of negative thinking.

In February, the Bank had offered £26.9 million of shares in exchange for £31.6 million of debts. By August, the South Sea Company had been able to exchange £26 million of debts for only £8.5 million of equity. It therefore had £17.5 million of shares left to dispose of, nearly four times the amount that the Bank had planned to sell. The company had been able to sell only half the shares by the time the bubble burst, but the amounts subscribed amounted to no less than £75 million.[49] The seemingly fantastic figures suggested in April had been considerably too low!

Subscribed, not paid. It was inconceivable, of course, that an amount considerably in excess of GNP could ever have been paid. The total money supply in the country was generally reckoned to be no more than £15 million. There was only one way of creating even the illusion of payment, and that was through credit. Here the Junto borrowed directly from John Law. Each issue was on progressively easier payment terms. The first was payable over sixteen months; the second over twenty-seven months. The third issue—by far the largest at £50 million—was payable over fifty-four months. The fourth witnessed a very slight shortening of terms to forty-five months. These were even more generous terms than those allowed by Law. In addition, the Junto used another of Law's tactics by employing the Sword Blade Bank to finance speculation. By June the bank was lending £400 per share, even against partially paid shares. In other words, a subscriber could put down £1,000 for £10,000 of shares (the rest payable over fifty-four months) and immediately borrow £4,000 against his investment.[50]

The scenes in London in 1720 rivaled anything that Paris had offered in 1719. Indeed, a great deal of smart money had now left Paris, dragging down the exchange value of the livre in its wake, and had headed for Exchange Alley. Like the informal chaos of the rue Quincampoix, dealings in South Sea stock avoided the Royal Exchange and took place in the narrow alleys and coffeehouses of the neighboring streets. As in France, the regular market participants were soon joined by a wave of foreign investors, and by every sort of local amateur, down to the least sophisticated. All sorts of rival promotions started up to take advantage of the seemingly endless supply of money and willingness to speculate. Some of these were valid and intelligent schemes, such as those for insurance or for ironworks. Some were far too futuristic for the time but have since come to fruition in other hands, such as gold mines in "Terra Australis." Others were mere hoaxes, none of which has become more famous than the "Company for carrying on an Undertaking of great Advantage, but Nobody to know what it is."*

More than one hundred of these lesser bubbles were started in May and

*Sadly, John Carswell, author of two definitive studies of the Bubble, states that he cannot find any clear evidence that this most notorious investment prospectus in financial history ever existed.

early June, and they threatened to siphon off money from the massive third issue planned by the Junto. Parliament obligingly passed the Bubble Act, banning joint stock companies except those already officially chartered.

Compared to the Banque Royale, the Sword Blade Bank was not a powerful tool of money creation. Nor was the Bank of England in a mood to help its rivals. This saved England from the rampant general inflation experienced in France. Indeed, the Junto had no desire to finance ventures other than its own; this was the reason for the Bubble Act, after all. But it was inconceivable that price rises could be confined to stocks and shares. Land prices rose to fifty times rental income, just as they had in France, as successful punters attempted to salt away their gains. Perhaps this was barely surprising when there were delirious pamphleteers proposing, in all seriousness, that the company "should purchase all the land in the kingdom."[51]

It was certainly very hard to keep one's head when all around were losing theirs. Isaac Newton sold out in April, stating that he could predict the motion of the heavens but not the madness of the people. Thomas Guy, an original shareholder from 1711, sold out in May and June, accepting prices significantly below the market in order to be paid in hard cash. His proceeds were £234,000, and it has sometimes been stated that the founding of Guy's Hospital was the only redeeming feature of the whole debacle.[52] Archibald Hutcheson continued to inveigh against the blindness of the speculators to the lack of underlying value. Some 20% of the irredeemable holders kept their heads on their shoulders and their assets in their safes. But many others had their judgment blurred by the contagion of the fever. Robert Walpole, who had sold out in March at below 200, could not prevent himself from being sucked back into the frenzy and avoided subscribing for the final issue only by pure good fortune. Even the Bank of England tendered £290,000 of its annuities in the last exchange offer.[53] This must have given the sweetest satisfaction to John Blunt and his coterie.

Of course, it could not last any more than the Mississippi Company boom could. The crunch occurred as the subscription payments started to take their toll in the autumn. It was accompanied by the rapid transfer of hard cash overseas by smart investors (many of them foreign) seeking to remove their profits to safe havens. The pound collapsed, just as the livre had collapsed in the spring. By late September, the South Sea Company was forced to seek the help of the Bank of England—little more than a month after the moment when the Junto had gloated over the Bank's apparent surrender. On September 24, the Sword Blade Bank closed its doors. The

process of mopping up had started in England as it had in France. South Sea shares were selling for under 200 by the end of the year—although this price still reflected a certain residue of forlorn optimism. The shares were finally to settle back to the modest level of 100 at which they had started.

The subsequent histories of France and Britain have been enlivened by a considerable number of financial disasters and market crashes. The French Revolution was to create financial chaos every bit as devastating as that of the Mississippi scheme. But it is doubtful whether, in purely financial terms, even the Revolution surpassed the events of 1719–1720 for sheer exuberance and excess. In Britain it is impossible to find any other event that comes close to the South Sea Bubble. The scale of the figures involved speaks for itself. Several have been given already, but one more is worth including. At the time of the fourth share issue in August, the theoretical market value of the South Sea Company was in the region of £280 million. This was more than four times the GNP of the country at the time. To put this figure in perspective, it is only necessary to observe that the current market value of all the domestic stocks and all the government bonds quoted on the London Stock Exchange is no more than double present-day GNP.