




CBO MEMORANDUM

IMPENDING DEFAULTS BY
WINNING BIDDERS IN THE FCC'S
C BLOCK AUCTION:
ISSUES AND OPTIONS

September 1997



**CONGRESSIONAL BUDGET OFFICE
SECOND AND D STREETS, S.W.
WASHINGTON, D.C. 20515**



In 1993, the Congress authorized the Federal Communications Commission to auction licenses to use portions of the radio spectrum. Several auctions have been held, raising several billion dollars for the federal Treasury. However, some bidders have failed to make payments on their winning bids, and financial analysts are concerned that a portion of the \$10 billion owed to the federal government for the C block licenses will not be paid as originally scheduled.

This Congressional Budget Office (CBO) memorandum describes the background to the problem of the C block licenses and identifies three broad options for dealing with a potential default by some of the winning bidders. It describes the main advantages and disadvantages of each option as well as the implications for the federal budget. In accordance with CBO's mandate to provide objective and impartial analysis, the memorandum contains no recommendations.

David Moore of the Natural Resources and Commerce Division prepared this memorandum under the supervision of Jan Paul Acton. Pete Fontaine, Rachel Forward, and Robert Sunshine of CBO provided useful comments. Questions about the analysis may be directed to David Moore.

CONTENTS

SUMMARY	iv
BACKGROUND: THE C BLOCK ALLOCATION AND AUCTION	1
OPTIONS FOR ADDRESSING THE C BLOCK PROBLEM	4
Option 1: Staying the Course	5
Option 2: Renegotiating	7
Option 3: Seeking a Clean Return	10
BUDGETARY IMPLICATIONS	11

SUMMARY

The Federal Communications Commission (FCC) faces the prospect of defaults by many of the winning bidders in an auction of licenses to use the radio spectrum. That auction, which concluded in July 1996, offered so-called C block licenses to provide personal communications services—the next generation of mobile telephone services. Winning bidders in that auction bid more than \$10 billion, 90 percent of which is payable to the federal government in installments over the next 10 years. The consensus of financial analysts is that the market value of the C block licenses on which that debt is owed is now far less than that amount. Consequently, many bidders are having difficulty raising sufficient funding from private capital markets to meet their obligation to the FCC. Unless current payment arrangements are changed, a massive default is possible.

The FCC suspended installment payments by the C block licensees in March 1997 and is now considering what action, if any, it should take. At least three basic options to address the problem are on the table: the FCC can stay the course, renegotiate the terms of payment, or provide for a "clean return" of the C block licenses to the FCC, presumably for reauction to a new set of bidders. The commission's choice will be a difficult one. Each option has drawbacks when measured against three important criteria—being fair to all of the bidders in the FCC auctions, ensuring that the incentives to bidders in future auctions remain consistent with achieving an economically efficient distribution of licenses, and delivering to consumers as quickly as possible the benefits of competition in markets for mobile telephone services.

The option to *stay the course* would leave the current payment policy in place. The current licensees would be required to make the installment payments that they agreed to. If the payments were not made, the FCC would cancel and reclaim the defaulting parties' licenses and seek to collect the outstanding debt according to Federal Claims Collection Standards.

Staying the course is fair to all of the bidders in the C block auction and preserves the integrity of the incentive structure of future auctions. It would, however, probably lead many C block licensees to default and enter into bankruptcy proceedings. Years could pass before those licenses were reclaimed and reauctioned by the FCC and before consumers received the benefits that might result from the entry of the new competitors into the market for mobile telephone services.

A second option is to *renegotiate* and reduce the current C block licensees' obligation to the FCC. Their debt burden could be reduced by simply forgiving a part of it or by radically stretching out and back-loading that debt to achieve the same effect. By most accounts, the C block licensees will be unable to secure the financing they need under this option unless the private market's valuation of their

remaining obligation to the government is reduced by 50 percent or more. A less dramatic reduction—for example, one that is achieved by suspending payments for several years—would not provide a sufficient write-down of the current debt to solve the problems of some licensees.

Renegotiating is unfair to the bidders who withdrew from the C block auction when prices rose above what they were willing to pay; it could also damage the incentive structure of future auctions. But some parties could benefit from a write-down. In addition to the C block licensees themselves, consumers could be the ultimate beneficiaries of a renegotiation. If the current licensees could finance the construction of their systems and avoid legal delays, they would probably be able to begin providing mobile telephone services earlier than the new licensees that would be created under either of the alternative policies. Renegotiating would make financing that construction more attractive to investors, and the gains to consumers could be substantial if the C block licensees quickly entered the market and provided mobile telephone services at a lower price. But adopting a policy of renegotiation would almost certainly be challenged in the courts and could lead to delays as long as those that would probably occur under current policy. Furthermore, the entry of the C block competitors into the market may not lead to lower prices and consumer benefits even if legal delays can be avoided.

A third option would be to seek a *clean return* of the C block licenses. The current licensees would be allowed to choose between paying under the current terms and returning their licenses under an amnesty—that is, without additional penalties. To encourage licensees to choose the latter option, the FCC is considering granting them additional benefits—for example, giving them a share of the receipts from reauctioning the returned licenses and, thus, helping them avoid bankruptcy by providing the funds necessary to settle debts with nongovernmental creditors.

The clean-return option would still be unfair to the losing C block bidders who acted under the belief that the rules would not be changed. A clean return would be less damaging to the incentive structure of future auctions than would a renegotiation, because C block winners who could not meet their obligations would not be rewarded with lower license prices. The details of a clean-return plan—for example, whether licensees taking advantage of amnesty could participate in a reauction or whether licensees would be given funds to pay off nongovernmental debts—matter a great deal, however, in determining the degree to which an amnesty does not create perverse incentives for future auctions. In an optimistic scenario in which legal delays were minimized, the C block frequencies could enter the market for mobile telephone services more quickly under a clean-return option than under current policy.

All of the likely solutions to the C block problem will require that the budget show additional outlays to account for the cost to the government of the impending C block defaults. The current Congressional Budget Office (CBO) baseline projects that for 1997, the FCC will record on the budget C block receipts of \$8.3 billion and a subsidy outlay of \$940 million, with net C block auction receipts of \$7.4 billion. CBO expects that the remainder of the C block receipts and subsidies will be recorded in fiscal year 1998, increasing net receipts to \$9.1 billion in the current baseline projection.

Current projections do not make adequate allowance for defaults by the C block licensees. Under the terms of the Federal Credit Reform Act of 1990, when the licenses are awarded, the budget records the auction transactions in two parts: the full amount of the winning bids (that is, a 10 percent down payment and the balance of 90 percent to be paid over 10 years) is recorded as a receipt, and the estimated subsidy for a loan in the amount of the unpaid balance is recorded as an outlay. The growing likelihood of default, therefore, should be reflected by increasing the estimated subsidy outlays. That increase is likely to be between \$4 billion and \$6 billion, depending on the details of the policy that is adopted and the market value of the licenses. Those outlays could be shown in 1998 or 1999 or be spread over both years, depending again on the new policies.

A variant of the renegotiation option that extends the term and back-loads the debt of the C block licensees could require substantially smaller additions to subsidy outlays. That option benefits from the budgetary treatment under credit reform, which emphasizes the cost to the government of direct loans rather than their value in the private market.

BACKGROUND: THE C BLOCK ALLOCATION AND AUCTION

In 1994, the Federal Communications Commission (FCC) finalized the allocation of 120 megahertz of spectrum for personal communications services (PCS).¹ The FCC intended that the allocation for PCS would allow licensees to provide a level of mobile communications that encompassed and went beyond that offered by the cellular telephone industry. The commission also hoped that allowing new competitors into the market for mobile telephone services would bring consumers the benefits of competition—primarily, lower service prices.

The 120 megahertz (MHz) allocated for PCS was subdivided into six blocks of spectrum, A through F. The A, B, and C blocks were 30 MHz each; the D, E, and F blocks were 10 MHz each. The A&B blocks were available in 51 relatively large geographic areas called major trading areas (MTAs), and the C, D, E, and F blocks were available in 493 smaller subdivisions called basic trading areas (BTAs). The C and F blocks were designated as entrepreneurs' blocks and were set aside for small businesses, businesses owned by women and minority groups, and rural telephone companies. Those groups were collectively known as designated entities.

The FCC's decision to set aside PCS licenses for designated entities and to offer other inducements—most important, the option to pay off winning bids on an installment plan at relatively low interest rates—was prompted by the requirements of the Omnibus Budget Reconciliation Act of 1993, which granted the commission the authority to auction licenses to use the radio spectrum. During the Congress's consideration of that law, concerns were expressed that using auctions might preclude businesses owned by individuals who were historically discriminated against (women and minorities) or that lacked access to capital markets (small businesses and rural telephone companies) from providing new telecommunications services. The law ultimately addressed those concerns by directing the commission to design and test systems of competitive bidding to ensure that some licenses would be won by those applicants.

The initial C block auction began in late 1995 and concluded in May 1996. Immediately after that sale, two bidders failed to make the required down payment on their bids. One of those was the fourth largest winning bidder (as measured by total dollars offered), BDPCS. The FCC declared the two bidders in default and reaucted the licenses in July 1996. The consolidated total of winning bids for the two C block auctions was \$10.2 billion.² Only a year earlier, large telecommuni-

1. Federal Communications Commission, *Memorandum Opinion and Order*, GEN Docket No. 90-314, FCC 94-144 (June 13, 1994).

2. Wireless Telecommunications Bureau, *Auctions Home Page, Summary Charts*, August 1997 (available at <http://www.fcc.gov/wtb/auctions/>), provides summary data on the C block auctions.

cations firms, including AT&T, won the A&B block licenses by offering a total of only \$7.7 billion.

The C block licensees had apparently paid an average of \$45 per person in the coverage area, compared with the roughly \$15 paid in the A&B block auction. From the private market's point of view, however, the favorable financing terms available to the C block licensees closed a large part of the difference.³ The A&B block winners were required to pay for their licenses in cash shortly after the close of the auction.⁴ In contrast, the C block winners were required to pay only 10 percent of their bids in cash and the remaining 90 percent of their offers over 10 years, with a six-year period of interest-only payments and financing at the Treasury rate—an interest rate far lower than winning bidders could have obtained in public debt or equity markets.⁵ Those terms effectively reduced the private market value of the winning C block bids by 40 percent compared with a requirement to pay off those bids immediately after the end of the auction.⁶ Thus, the private market's valuation of the price paid by the average winning bidder was closer to \$25 per person in the coverage area than to \$45. The offer to allow C block winners to borrow at the government rate is the primary source of economic subsidy. The licensees were charged a relatively low government rate to borrow, but the private market calculates the present value of that future commitment by discounting it at a higher, private-market rate of interest.

At the close of the C block reaction, 89 different bidders had won C block licenses. The largest winner, NextWave Telecom, Inc., accounted for over 45 percent of the total winning bids and won the right to offer PCS services to over 40 percent of the U.S. population. The top three bidders accounted for over 70 percent of the total winning bids and won licenses covering over 60 percent of the population. Nearly 90 percent of winning bids were accounted for by the top 10 bidders, who won licenses covering almost 80 percent of the population.

3. Congressional Budget Office, *Where Do We Go From Here? The FCC Auctions and the Future of Radio Spectrum Management* (April 1997), p. 19.

4. The A&B block allocation included 102 licenses, two in each of 51 major trading areas. Only 99 licenses were actually auctioned. The remaining three, one each in the MTAs covering New York City, Los Angeles, and Washington, D.C., were granted to firms qualifying for a PCS license under the FCC's pioneer's preference program. Those firms were charged a price for their licenses equal to 85 percent of the auction price for the one license sold in the appropriate MTA. Like the C block licensees, the three pioneers will pay for their licenses on an installment plan. That arrangement—concluded before the determination to enter FCC auction receipts on the budget as direct loans—will be entered on the budget as a cash transaction, with both principal and interest payments credited as receipts at the time those payments are made. The pioneers' payments account for about \$700 million of the \$7.7 billion paid for the A&B block licenses.

5. Federal Communications Commission, *Second Report and Order*, PP Docket No. 93-253, FCC 94-61 (March 8, 1994), pp. 89-116.

6. Congressional Budget Office, *Where Do We Go From Here?* p. 19.

The largest winning bidders drove the average prices paid in the auction. The three largest winners paid nearly \$47 per person in the coverage area. Some C block winners, however, paid prices roughly the same as those paid by the A&B block winners. In three MTAs, the average price (unadjusted for favorable financing) paid for component BTAs was equal to or less than 1.5 times the price paid for the larger MTA. In 10 MTAs, the same measure of BTA price was equal to or less than twice the price paid for the relevant MTA.

Although the winning bidders were all eventually certified by the FCC as qualifying as small businesses, the size of the financial commitment that the largest winners made in the auction seems inconsistent with the usual picture of a small business. In fact, the commission's rules permitted many large businesses to participate in the auction through various connections with the C block bidders. NextWave's backers included Qualcomm, a domestic supplier of telecommunications systems with 1995 revenues of almost \$400 million; Goldstar, the largest producer of consumer electronics in South Korea; and Sony.⁷

Since July 1996, the C block auction winners have been awarded their licenses and over \$8 billion in gross receipts has been recorded on the federal budget. That total includes the down payments—10 percent of the winning bidders' offers, which must be paid when the licenses are issued—and the remainder of their winning bids, which they agreed to pay over time. The budgetary treatment is the one prescribed by the Federal Credit Reform Act of 1990 for direct loans. That law requires the amount of the winning bids to be entered on the budget at the time loans are made but recognizes the prospect of default in a subsidy account. That account currently shows nearly \$1 billion in expected defaults on installment payments by the C block licensees.

At the same time the FCC was issuing licenses and receipts were being recorded on the budget, signs of financial distress among the C block licensees became increasingly evident. As a group, the licensees were unsuccessful in obtaining either debt or equity financing of the \$4 billion to \$6 billion needed to pay their obligations to the federal government and build their mobile communications systems.⁸ In March 1997, Pocket Communications, a bidder who offered over \$1.4 billion for 43 licenses and accounted for the second largest share of the C block auction receipts, went into bankruptcy. Shortly thereafter, the FCC suspended

7. Ibid., p. 26.

8. Before the C block auction had concluded, Coletta Fleming and Edward M. Greenberg estimated that the first-year capital requirement for the C block licensees would be \$4.6 billion and that the high bidders would have difficulty raising the money. See Fleming and Greenberg, "Perspectives on the PCS Auctions," *Morgan Stanley U.S. Investment Research*, May 2, 1996, pp. 3-4.

installment payments for all of the licensees and, in June 1997, initiated a process to address the questions raised by pending C block defaults.

According to financial analysts, the bankruptcy of Pocket Communications will be followed by many others unless the debt owed to the government by the C block licensees is sharply reduced. The views expressed in a June 1997 forum sponsored by the FCC are typical. The four panel members at that forum indicated that the present value of the C block licensees' obligation to the government would have to be reduced from a market value of about \$25 per person in the coverage area to \$10 or lower if the C block licensees were to become viable candidates for additional debt or equity financing.⁹

OPTIONS FOR ADDRESSING THE C BLOCK PROBLEM

The many different solutions to the C block problem being considered by the FCC can be reduced to three broad options:

- o Staying the course,
- o Renegotiating and reducing the C block licensees' debt to the government, and
- o Seeking a clean return of the licenses on which default is likely by declaring an amnesty under which current licensees can return their licenses to the FCC without incurring the additional penalties that are now required.

The difficulty of the commission's task is clear. None of the three options is wholly satisfactory when evaluated against three criteria that the commission is likely to consider: being fair to all of the bidders in the FCC auctions, ensuring that the incentives to bidders in future auctions remain consistent with achieving an economically efficient distribution of licenses, and delivering the benefits of competition in markets for mobile telephone services to consumers as quickly as possible.

9. Debra Wayne, "FCC Leans Towards Radical PCS Restructure," *RCR: The Weekly Newspaper for the Wireless Industry*, July 14, 1997, p. 1.

Option 1: Staying the Course

Staying the course involves enforcing the payment rules that are currently on the books and accepting the consequences. The payment rules are clear: failure to pay will result in cancellation of the license, and the government will seek to collect the outstanding debt as specified by Federal Claims Collection Standards. According to many people in the financial community, the consequences of staying the course are equally clear: the C block licensees who won the most licenses and accounted for the preponderance of auction receipts cannot pay their obligation, and following the lead of Pocket Communications, they will default and file for bankruptcy. Some C block licensees, who hold licenses for small markets that only account for a small fraction of total receipts, might be able to make their payments and survive under this option, including at least two that have already begun to provide service.¹⁰

Judged against the criterion of fairness to other bidders, staying the course is superior to the alternatives of renegotiating or seeking a clean return. The winning bidders were well aware of the risks inherent in making the offers they did but chose to bid higher amounts while others dropped by the wayside. It would be unfair at this point for the FCC to change its rules to support what turns out to have been bad business judgment on the part of the C block licensees, in effect penalizing bidders who exercised good business judgment and dropped out.

Some petitioners have argued that fairness requires the commission to reduce the C block licensees' debt. They argue at great length that it would be unfair not to reduce that debt because winning bidders have been the victim of special circumstances—for example, a large fall in the share prices of the stocks of wireless telecommunications providers—and unexpected regulatory delays.¹¹ The merit of those claims, however, has been vigorously disputed by petitioners who oppose them.¹²

Staying the course also seems to be the best alternative when the incentives operating in future auctions are taken into account. Under the current payment rules, the strongest incentives operating in FCC auctions have steered bidders toward making their offers on the basis of their plans to use the licenses in providing

10. George Lurie, "Second C-Block Carrier Cook Turns on Tulsa Service This Week," *RCR: The Weekly Newspaper for the Wireless Industry*, June 2, 1997, p. 9.

11. See comments of NextWave Telecom, Inc., and General Wireless, Inc., about restructuring the installment payments for winners of the C and F block auctions, made before the Federal Communications Commission, WT Docket No. 97-82 (June 23, 1997).

12. See comments of Nextel Communications, Inc., and Cook Inlet Region, Inc., and others, about restructuring the installment payments for winners of the C and F block auctions, made before the Federal Communications Commission, WT Docket No. 97-82 (June 23, 1997).

telecommunications services. Awarding the licenses to the bidders guided by that incentive is likely to produce an economically efficient distribution of licenses. Pursuing solutions to the C block problem that weaken the links between the incentives steering bidders' behavior and an efficient distribution of licenses could be costly in terms of lost output.

If the FCC was to liberalize its payment rules this time, the bidders in future auctions would be bidding based on both the economic value of the license on the block and the probability that the FCC would later reduce the bidders' obligation to the government. In that circumstance, an auction would award licenses to the bidders who had the highest combined expectation of making profits by providing the communications services permitted by the licenses and of the FCC's postauction discounts. Winning bidders whose underlying valuations included expected discounts would base their valuations on spurious factors, such as their ability to affect the size of the discount that might be offered in a postauction renegotiation.

The major drawback of staying the course is the possibility that current policy will lead to default, bankruptcy, and years of delay in bringing the C block frequencies to the market for mobile telephone services. The FCC maintains that the licenses it issues cannot be protected by bankruptcy courts and should be quickly returned to the commission's control following a bankruptcy filing. Nevertheless, the commission has acknowledged on several occasions that the courts may not agree.¹³ The Administration and the FCC sought to clarify the potential conflict between communications and bankruptcy law in new legislation, but proposed provisions resolving the issue in the FCC's favor were not included in the recently enacted reconciliation bill. As it now stands, particularly if the Pocket Communications bankruptcy is an indicator, substantial delays in recovering and reaucting the C block licenses are likely if maintaining the current policy forces many of the C block licensees into bankruptcy.¹⁴

Because the issue of the cost of delay to consumers figures prominently in the case for changing current policy, the merits of that argument and the size of the potential gains to consumers that might accompany the entry of the C block licensees into the market are discussed under the next option—renegotiating and reducing licensees' obligation to the government.

13. Letter from Reed Hundt, Chairman, Federal Communications Commission, to Pete Domenici, Chairman, Senate Committee on the Budget, and John R. Kasich, Chairman, House Committee on the Budget, July 25, 1997.

14. David Kaut, "Hundt Has Hard Sell to Convince FCC on Reaucting Plan for C-Block Conundrum," *Daily Report for Executives*, August 26, 1997, p. C-1, quotes the chief executive officer of Pocket Communications, Dan Riker, as indicating that his firm's licenses were under the control of the bankruptcy court and that the chances of the FCC reclaiming the licenses any time soon were low.

Option 2: Renegotiating

The objective of renegotiating the C block licensees' debt to the government would be to reduce that burden to levels that allow the licensees to finance the construction of their networks and enter the market for mobile telephone services. Although the price paid by the A&B block licensees—\$15 per person in the coverage area—is often mentioned as a benchmark, a problem with renegotiating is that the FCC rather than the market would have to determine how much debt reduction was enough. Reducing debt too little would not solve the problem; reducing debt too much would needlessly decrease federal receipts. The debt of the current C block licensees could be reduced in two ways. The commission could allow them to make up-front cash payments comparable with those paid by the A&B block licensees. Alternatively, the commission could restructure and lengthen the term of the debt, which would have a similar effect from the viewpoint of the financial community.

A proposal offered by NextWave advocated the second approach to reducing the C block debt. That proposal would change the current payment plan from a 10-year schedule with payments of interest only for years 1 through 6 and interest and principal payments for years 7 through 10, to a 20-year schedule with no payments in years 1 through 8, interest only in years 9 through 19, and interest and the entire principal in the final year.¹⁵ By NextWave's calculation, adopting the 20-year payment plan would reduce the private-market value of its obligation to the government from almost \$27 per person in the coverage area to about \$14.¹⁶ The NextWave analysis also makes a second point: more modest proposals to restructure the C block debt—for example, suspending payments for several years and then returning to the current schedule—will not reduce the C block debt enough to bring it in line with the \$15 per person price paid for the A&B block licenses.

Renegotiating is unfair to bidders who withdrew as the auction established ever higher prices and encourages counterproductive bidding in future auctions. Because the current licensees would benefit substantially from the renegotiating option, bidders who lost in the C block auctions could have grounds for legal challenges that could prevent the current licensee from entering the market quickly—the alleged major benefit of renegotiation. As stated above, renegotiation could damage the incentive structure of future auctions. An early indicator of such an influence is the petitions that the commission is receiving from winning bidders in other auctions

15. Comments of NextWave Telecom, Inc., Appendix A, pp. 34-35.

16. NextWave Telecom, Inc., "Excerpts from Overview of Telecommunications Financing Considerations" (briefing presented to the Congressional Budget Office, Washington, D.C., July 2, 1997), p. 10.

who are not experiencing financial difficulty but argue that it is only fair that they get what the C block winners get.¹⁷

Advocates of decreasing the C block licensees' obligation by changing the rules ultimately make their case on the grounds that the current licensees offer the best chance of quick entry into the market for mobile telephone services and of bringing the benefits of competition to consumers. That argument hinges on a successful renegotiation without long legal delays (an outcome that is less than certain) and the effect of C block entrants on service prices. The entry of the A&B block licensees into some markets has already led to price decreases. Benefits to consumers could be substantial, and the cost of delay accordingly high, if the C block licensees accentuated the trend by pricing their services even lower. If, however, the entry of C block providers did not lead to lower prices, benefits would be small and the cost of delay accordingly low.

How much might it be worth to have an early entry by the C block licensees into the PCS market? A simple estimate of the size of the benefits to consumers is \$5.5 billion. That estimate assumes that the C block licensees enter a \$35 billion market for mobile telephone services in 1998, that they lower prices by 5 percent three years earlier than under any other alternative, and that consumers do not change the quantity of their purchases.

A higher estimate of around \$7 billion results from a more sophisticated approach.¹⁸ That approach uses economic models of competition to describe the competitive behavior of current producers and new entrants and the effect of that behavior on service prices. The estimate requires a number of assumptions that, if changed, could either increase or decrease the estimate. First, the estimate assumes that when the price of wireless telephone services falls, consumers will increase their purchases proportionately. Empirical studies indicate, however, that the increase in the quantity of services purchased by consumers will be less than proportionate to the drop in price. Taking account of that less elastic demand decreases the estimated benefits to consumers of an early entry of C block licensees into the market.¹⁹

17. "More Wireless Firms Seek Help on Payments," *Reuters[OL]*, August 11, 1997 (available at <http://www.online.reuters.com/online/reports.html>).

18. Letters to the Federal Communications Commission from Paul Milgrom, September 1 and September 21, 1995, provide estimates of the increases in consumer surplus that could result from the entry of new competitors into the market for mobile telephone services. The estimate presented in this memorandum simply scales up Milgrom's estimate to a conservative projection of industry receipts for 1998 through 2000.

19. Jerry Hauseman, *Cellular Telephone, New Products and the CPI*, Working Paper No. 5982 (Cambridge, Mass.: National Bureau of Economic Research, March 1997), p. 9, using data on the top 30 cellular markets for 1989-1993, estimates that the price elasticity of demand for cellular telephone service is between -.41 and -.51. However, demand has probably become more price sensitive as more people use cellular telephone service.

Second, the \$7 billion estimate assumes that all producers have the same cost of production. To the extent that C block licensees have higher costs of production than other providers of wireless services, the benefits of the new entries to consumers will be reduced. Smaller C block licensees may be at a cost disadvantage compared with other producers because of the relatively small scale of their operations. The largest C block licensee and potential entrant, NextWave, would probably contend, however, that its marginal costs will be lower than other producers' because its strategy to become a wholesaler of wireless services reduces the administrative and marketing costs of dealing directly with the final consumers of those services.

The question remains, however, whether the entry of C block licensees will have much influence on price at all. The assumption about competitive behavior and entry underlying the \$7 billion estimate of consumers' gain is generally consistent with the case made by the C block licensees. They paint a picture of a future wireless services industry that is dominated by large telecommunications businesses that have found ways to compete with one another that do not involve price reductions, until some disruptive element—the C block licensees—enters the market and forces prices to fall.

Two alternative scenarios are possible, however. First, price competition in the market for wireless services could be intense without the presence of the C block licensees, leaving little room for additional price reductions when a new competitor enters. In the small number of markets where a new PCS licensee has begun to compete with established cellular providers, service prices have already fallen by about 20 percent.²⁰ By 1998, consumers in most areas will have a choice among four or five providers of wireless telephone service even if the C block licensees have not entered the market. Economic theory does not provide solid guidance as to whether prices will reach the competitive level with four, five, or six competitors, but it is certainly possible that a competitive price level could be reached with only four.

The second alternative is that the C block licensees may seek a share of the market but, as is sometimes the case in markets dominated by a few large firms, will be ever mindful of the effect of their behavior on market prices. The role does not really fit the smaller C block licensees, who may have little to offer but lower prices. They are the same firms, however, that also may be at a cost disadvantage compared with other producers and thus may have difficulty offering lower prices. The frequencies licensed to the largest C block licensee, NextWave, however, may ultimately find their way to consumers through large, well-established telecommunications companies that understand that price competition can be ruinous. For example, MCI is NextWave's largest potential customer and will set the

20. Congressional Budget Office, *Where Do We Go From Here?* p. 41.

price that consumers ultimately pay to use the C block frequencies. If that firm, or any other large wholesale buyer of those frequencies, does not choose to compete by lowering prices, consumers will see little added benefit from renegotiating NextWave's payment obligation.

Option 3: Seeking a Clean Return

The clean-return option would encourage C block licensees who could not make their payments under current policy to return their licenses to the FCC in exchange for amnesty from default penalties and, in some variants, certain other considerations. The logic behind the proposal is that negotiating with the current licensees and their creditors could sidestep the bankruptcy issue and get the licenses back to the commission for reauction without significant delay. To that end, some people have even suggested that C block licensees who return their licenses without recourse to bankruptcy should be granted a share of receipts of a reauction, in part to entice them to participate and in part to provide cash to pay off nongovernmental creditors. Although the losing bidders in the original C block auction might have grounds to challenge and delay, those grounds may not be as strong as the ones provided by a negotiated reduction of the current licensees' debt.²¹

An advantage that seeking a clean return has over renegotiating is that it relies on the market to value the C block licenses. Renegotiating with the objective of leaving the C block licensees in a position to obtain financing to set up their systems places the burden of determining the market value of the licenses on the FCC. In contrast, permitting a clean return of the licenses, like staying the course, allows the market to determine whether the current licensees can survive with their current obligations and, in the event of defaults, what the market value of the licenses is in a reauction.

Evaluating the clean-return option against the criteria of fairness and the effects on the incentive structure in future auctions is an exercise in shades of gray. Any rule changes that grant relief to winning bidders are arguably unfair to bidders who withdrew as well as to those who have already lost payments made before default. Rule changes that provide relief from penalties only for C block bidders, however, are unlikely to have a large effect on the incentive structure of future auctions. If defaulting C block licensees enjoy benefits in addition to amnesty from the penalties required by current law, allowing a clean return will be less fair to losing bidders in

21. Kaut, "Hundt Has Hard Sell to Convince FCC on Reauction Plan for C-Block Conundrum," p. C-5, quotes FCC Chairman Hundt as indicating that legal challenges to a clean return would encounter difficulty to the extent that prospective plaintiffs would not be able to claim that C block licensees who took advantage of amnesty had gained anything.

the C block auction and potentially more harmful to the incentives offered in future auctions. A number of questions, the answers to which are beyond the scope of this analysis, are important in that regard:

- o Will licensees holding more than one license be able to default on some licenses but not on others?
- o Will licensees be permitted to return some fraction of the spectrum covered by a license—but retain the balance—and reduce their obligation proportionately?
- o Will a defaulting licensee be permitted to participate in future auctions, particularly the reauction of C block licenses, including licenses on which it defaulted?
- o Will down payments be refunded to licensees who take advantage of a clean return under amnesty?

The objective of seeking a clean return is to capture the benefits to consumers of bringing the C block frequencies to the market for mobile telephone services as quickly as possible by avoiding the legal delays that are likely to occur if current policy is left unchanged or if the commission reduces the current C block licensees' debt burden by renegotiating. As in the case of renegotiation, the benefits of early entry that seeking a clean return brings to consumers could be substantial or inconsequential, depending on the competitive landscape of the market before and after the entry of the C block competitor.

BUDGETARY IMPLICATIONS

The Office of Management and Budget (OMB) and the Congressional Budget Office (CBO) have determined that the installment payments granted to winners of the C block licenses constitute direct loans as defined under the Federal Credit Reform Act of 1990 (FCRA). Under that law, the FCC records the total value of the winning bids for a licensee on the budget after the license is issued and the company signs a promissory note. Concurrently, the FCC records the subsidy cost of the loan (in the case of the C block licenses, a default allowance). For fiscal year 1997, CBO estimates that the FCC will report on the budget C block receipts of \$8.3 billion and a subsidy outlay of \$940 million, yielding net C block auction receipts of about \$7.4 billion. CBO expects that the remainder of the C block receipts and subsidies will be recorded on the budget in fiscal year 1998, increasing net receipts to \$9.1 billion—\$10.2 billion in winning bids and \$1.1 billion in subsidy cost for a default allowance.

FCRA directs OMB to include in the President's budget the projected subsidy rate for each loan program. In fiscal year 1997, OMB set the subsidy rate at 12 percent based on the assumption that the FCC would not collect about 25 percent of the total winning bids but that the agency would be able to reacquire the licenses of the bidders in default and recover some of the funds. CBO expects that the C block problem will be recognized in the budget by increasing the subsidy rate and, accordingly, the outlays set aside to recognize the cost to the government of the impending C block defaults.

The amount that outlays would have to be increased to cover the cost of the C block problems will probably vary between \$4 billion and \$6 billion, depending on the market value of the C block licenses and the specifics of the policy adopted by the FCC. For example, staying the course would require additional outlays of about \$4 billion, assuming that the C block licenses are worth what was paid for the A&B block licenses (about \$15 per person in the coverage area); that the government keeps the down payment that the winning bidders in the initial C block auction have already paid; and that the government eventually reacquires the returned licenses for the market price of \$15 per person in the coverage area.

Alternatively, CBO estimates that if the FCC renegotiated the terms of the payments so that winning bidders paid \$15 per person in the coverage area, an additional outlay of about \$5 billion would be shown on the budget. The difference in cost between this variant of the renegotiation option and staying the course occurs because the down payments would be retained under the stay-the-course option but would be applied to the negotiated final price under a renegotiation. If a renegotiation was carried out with the goal of reducing the license price paid by the current licensees to \$10 per person, then outlays of \$6 billion would be needed. The clean-return option also would probably require an increase in outlays of between \$4 billion and \$6 billion, depending on the market value of the licenses and the disposition of the down payments that have already been made.

The budgetary treatment of the C block receipts under FCRA creates an exception to the generalization that recognizing the cost to the government of anticipated defaults will require new outlays of \$4 billion to \$6 billion. Under the variant of the renegotiation option that stretches out and back-loads the C block licensees' debt to the government, the gap between the government's valuation of the C block debt and the private market's valuation would widen. Because federal credit accounting is based on the government's cost of lending, the C block licensees' debt could be stretched out and back-loaded without changing the value of the loan on the budget: the interest rate charged by the government would be the same rate at which interest and principal payments are discounted. The value of that debt in the private market would be dramatically decreased, however, as noted in the discussion of NextWave's proposal to renegotiate. Even in that case, however, the current level of

outlays for default recognized in the budget is too low and would be increased by some amount—probably far less than \$4 billion—in future estimates.