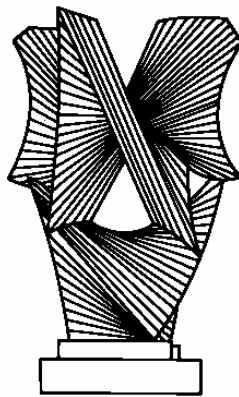


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Tax Expenditures, Principal Agent Problems, and Redundancy

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Tax Expenditures, Principal Agent Problems, and Redundancy

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June 28, 2006

Abstract

This paper considers tax expenditures from two related perspectives. First, it analyzes how the incentives on Congress to use a tax expenditure change when principal agent problems are considered. For example, it considers whether tax expenditures can reduce moral hazard or adverse selection problems created by delegations to expert agencies. Second, it considers the condition under which tax expenditures should be expected to be redundant with direct expenditures, as many are. The two, principal agent problems and redundancy, are related because redundancy is often seen as a solution to the principal agent problem. The paper concludes that both principal agent concerns and redundancy might lead to an increase in the use of tax expenditures, although the circumstances in which we should expect this are relatively narrow. The paper then examines the example of the low income housing tax credit, concluding that the credit should be replaced with a direct expenditure in the form of increased tenant vouchers.

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Tax Expenditures, Principal Agent Problems, and Redundancy

David A. Weisbach*

June 28, 2006

The goal of this paper is to add to the long line of literature exploring tax expenditures.¹ The traditional argument, embodied in the many articles and books by Stanley Surrey and coauthors, is that tax expenditures should be eliminated to the extent possible and replaced with a broad tax base. Surrey's reasons were complex and varied but to a large extent relied on a view that tax expenditures were bad *tax* policy.²

In a previous paper, I suggested (along with Jacob Nussim) that tax policy has nothing to do with the matter.³ Instead, the decision to locate a policy program in the tax agency was a matter of whether the tax agency is a more efficient administrator of the program. The answer to this inquiry depends on such factors as specialization, coordination, economies of

*Walter J. Blum Professor, The University of Chicago Law School. I thank Adrian Vermuele and participants at presentations at Washington University and the University of Chicago for comments, and Christine Graham, Joe Paral, and Adam Weinstock for excellent research assistance.

¹The literature on tax expenditures is vast. The following is a partial list of the literature: Stanley S. Surrey, *Pathways to Tax Reform: The Concept of Tax Expenditures* (1973); Stanley S. Surrey & Paul R. McDaniel, *Tax Expenditures* (1985); Stanley S. Surrey and Paul R. McDaniel, *The Tax Expenditure Concept and the Budget Reform Act of 1974*, 17 *B.C. Ind. And Com. Law Review* 679 (1976); Stanley S. Surrey and Paul R. McDaniel, *The Tax Expenditure Concept: Current Developments and Emerging Issues*, 20 *Boston College Law Review* 225 (1979); Boris I. Bittker, *Accounting for Federal "Tax Subsidies" in the National Budget*, 22 *National Tax Journal* 244 (1969); Stanley S. Surrey and William F. Hellmuth, *The Tax Expenditure Budget – Response to Professor Bittker*, 22 *National Tax Journal* 528 (1969); Boris I. Bittker, *The Tax Expenditure Budget – A Reply to Professors Surrey & Hellmuth*, 22 *National Tax Journal* 538 (1969); Edward A. Zelinsky, *James Madison and Public Choice at Gucci Gulch: A Procedural Defense of Tax Expenditures and Tax Institutions*, 102 *Yale L.J.* 1165 (1993); Edward A. Zelinsky, *Efficiency and Income Taxes: The Rehabilitation of Tax Incentives*, 64 *Texas Law Review* 973 (1986); Edward Yorio, *Equity, Efficiency, and the Tax Reform Act of 1986*, 55 *Fordham Law Review* 395 (1987); Edward Yorio, *The Future of Tax Reform: A Rejoinder to Professor Zelinsky*, 55 *Fordham Law Review* 899 (1987); Victor Thuronyi, *Tax Expenditures: A Reassessment*, *Duke Law Journal* 1155 (1988); Anne L. Alstott, *The Earned Income Tax Credit and the Limitations of Tax-Based Welfare Reform*, 108 *Harvard Law Review* 533 (1995); Eric Toder, 53 *National Tax Journal* 361 (2000), David Weisbach and Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 *Yale L. J.* 995 (2004); Douglas A. Kahn and Jeffrey S. Lehman, *Tax Expenditure Budgets: A Critical View*, 54 *Tax Notes* 1661 (1991); Daniel Shaviro, *Rethinking Tax Expenditures and Fiscal Language*, 57 *Tax L. Rev.* 187 (2004). For a review of tax expenditures in OECD countries, see OECD, *Tax Expenditures: Recent Experiences* (Paris 1996). A comparative study of tax expenditures and an attempt at unifying the concepts is found in *International Aspects of Tax Expenditures: A Comparative Study* (Stanley S. Surrey and Paul R. McDaniel, eds. 1985).

²See Stanley S. Surrey, *Pathways to Tax Reform: The Concept of Tax Expenditures* (1973); and Stanley S. Surrey & Paul R. McDaniel, *Tax Expenditures* (1985). For a summary of Surrey's reasons for eliminating tax expenditures, see David Weisbach and Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 *Yale L. J.* 995 (2004).

³David Weisbach and Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 *Yale L. J.* 995 (2004).

scale or scope, and the like, not tax policy.⁴ The task is akin to assigning functions to divisions or subsidiaries of a corporation. There are benefits to having broad agencies that can coordinate across policies and to having specialized agencies that will gain expertise in performing particular tasks. Allocation of functions requires a balancing of these concerns. The tax agency has particular expertise in measuring income and in processing paper. This may mean that the tax agency should be the first choice for programs where these factors predominate, such as welfare programs.

As suggested in my paper and as Nancy Staudt⁵ has pointed out, there may be reasons other than specialization and expertise for using an agency to administer a program. In particular, the specialization/coordination analysis did not consider principal-agent, public choice, and similar problems, and these may significantly affect the choice to use the tax agency to administer a program.

This paper builds on the specialization/coordination analysis by adding two additional, related factors: principal agent problems and redundancy. The two are closely related because the use of multiple or redundant agents is an important solution to the principal agent problem. The two are different, however, because it is possible to consider the effects of the principal agent problem on a single agency and to consider reasons for redundancy in the absence of principal agent problems. They have sufficient overlap, however, that they can usefully be discussed in a single paper.

This paper puts aside public choice considerations that might lead to tax expenditures.⁶ The distinction between principal-agent considerations and public choice considerations is not at all clear, however, as many public choice problems arise because government agents cannot be monitored by the public (the principal). The principal agent problem I will consider is between Congress and bureaucratic agencies. The principal agent problem in many public choice settings arises because of free-rider problems when large groups must monitor government agents. The source of information problems and, therefore, potential solutions, are distinct in the two settings. Moreover, the public choice problem involves a setting with multiple principals, while I will consider a setting with a single principal (Congress) and multiple agents.

⁴Surrey also explores many of these reasons for using the tax system to administer programs. See cites in note 2.

⁵Nancy Staudt, *Redundant Tax and Spending Programs*, *Northwestern Law Review* (2006, forthcoming)

⁶For an example of the application of public choice considerations to tax expenditures, see Edward A. Zelinsky, *James Madison and Public Choice at Gucci Gulch: A Procedural Defense of Tax Expenditures and Tax Institutions*, 102 *Yale L.J.* 1165 (1993).

I will consider Congress as a single principal, which means that I will ignore the complex internal structure of Congress.⁷ Instead, I will focus on congressional-bureaucratic relationships, treating Congress as represented by the median floor voter. This is obviously a significant simplification. The hope is that many of the same considerations might apply to the structure of the committee system as to the structure of the bureaucracy. If so, decisions regarding committee structure would be similar to agency structure and the two would roughly mirror one another. Nevertheless, I make no claims with respect to structure of Congress.

To preview the analysis, consider first the principal agent problem where there is a single agent. Suppose that Congress is considering the trade-off between delegating to a line agency or the tax agency and that considerations of specialization and coordination favor the line agency because of the line agency's expertise in a subject matter. But suppose also that Congress is unwilling to give the agency substantial discretion because of principal agent problems. If Congress is unwilling to give the line agency discretion, it cannot take advantage of the agency's expertise, which might change the trade off in favor of using the tax agency. Concerns about principal agent problems, therefore, might tip the balance in program design toward the use of the tax agency. In particular, we should expect to see more use of tax expenditures the larger the difference between congressional preferences and agency preferences.

Now consider redundancy. Economists and political scientists have put forth three reasons for redundancy in performing a task. First, redundancy might create reliability in an engineering sense. Redundant agencies might be like redundant engines on an aircraft; if one fails, the others are likely to continue working, ensuring the task is performed. This argument for redundancy does not address principal agent problems – it is purely engineering. Some tax expenditures might fall into this category because tax expenditures might represent an independent source of risk that can be used to diversify the risk from using only line agencies.

Finally, we can combine the two; redundancy might be used to reduce principal agent problems. There are two distinct versions of this problem: adverse selection and moral hazard. The political science literature has focused on the adverse selection problem. In these models, Congress (the principal) does not know the agency's cost function. Agency competition forces agencies to reveal their costs to the principal, thereby reducing or eliminating the adverse selection problem. I will argue that this argument is unlikely to apply to tax expenditures because the tax agency, at least in the U.S., does not and cannot reveal its costs for administering particular programs. It simply does not have that information. Moreover, the tax agency does not typically want these programs – they are not part of its

⁷The literature on the internal structure of Congress is extensive. For a sampling, see the essays in *Positive Theories of Congressional Institutions* (Kenneth A. Shepsle and Barry R. Weingast eds. 1995).

mission or turf. It will not compete for non-tax programs and, therefore, it will not act to force other agencies to reveal information.

Political scientists have not argued that agency redundancy or competition can help reduce moral hazard problems. This is the case notwithstanding that explanations of the delegation decision focus on moral hazard and that there are standard economic models showing that the use of redundant agents can help reduce moral hazard problems. I will argue that the reason for this gap in the literature is that delegations to bureaucratic agencies cannot use high powered incentives. The use of tournaments and other multiple agent systems rely on high powered incentives and, therefore, may not be appropriate in the bureaucratic setting. This carries over to the use of the tax agency to reduce moral hazard problems with the performance of other agencies. Using or threatening to use the tax agency to improve performance of another agency creates high powered incentives which may distort the performance of the other agency in undesirable ways. Therefore, moral hazard problems cannot help explain redundant tax expenditures.

In the spirit of this conference – positive analysis – two predictions come out of the analysis (neither of which is tested here). First, as preferences between Congress and the agency get farther apart, we are more likely to see tax expenditures. Second, we are more likely to see redundant tax expenditures when the tax agency can act as an independent source of risk.

Part I provides background on delegation, tax expenditures, and redundancy. It reviews recent theories of delegation and discusses the extent to which tax expenditures are redundant with direct expenditures. It is well-documented that direct spending programs tend to be redundant with one another. Tax expenditures to some extent repeat this pattern: many seem redundant but, on the other hand, many of the largest and oldest tax expenditures do not have clear redundancies with direct spending.

Part II considers how principal agent problems affect Congress's choice to use a tax expenditure assuming there is no redundancy. The argument is that principal agent problems might reduce the extent of discretion in a delegation. This tilts the choice toward using the tax agency because with less discretion, Congress cannot take advantage of the expertise of a line agency.

Part III considers the case where there is redundancy but no principal agent problem. The rationale for redundancy in this case is reliability. Here, the question is when the tax agency acts in a special role, different from other agencies. The argument will be that the tax agency can sometimes act as an independent source of risk, allowing additional diversification.

Parts IV and V combine principal agent problems and redundancy. Part IV considers redundancy as a solution to adverse selection problems. Part V considers redundancy as a

solution to moral hazard problems. I will argue that neither case explains the use of tax expenditures.

Part VI considers an example of a redundant tax expenditure, the low income housing tax credit. It argues that the rationales for redundancy are not strong in the case of this credit and that, based on the data available to date, the tax credit should be eliminated in favor of increased direct spending on tenant vouchers.

I. Delegation, Redundancy, and Tax Expenditures

A. Delegation and Redundancy in General

Political scientists have long studied the decision by Congress to delegate a function to an agency. In a typical model, Congress (say the median floor voter in Congress) faces uncertainty about what actions to take to achieve a desired outcome. Agencies have expertise but may also have policy preferences that do not match those of the policymaker. Congress cannot directly observe the actions taken by the agency. Instead, it can only observe outcomes. Because of the policy uncertainty, it cannot infer actions from outcomes, so there is a moral hazard problem. Congress acquires information and sets the scope of delegation to minimize some combination of policy risk and agency bias. Layers of complexity can be added to this basic idea, such as adding the President, the committee system, and lobbyists (who may help monitor agencies).

As summarized by Huber and Shipan, there are two general ideas generated by this framework.⁸ The first is the uncertainty principle, which states that as Congress's uncertainty increases relative to that of the agency (all else equal), the Congress will grant the agency more discretion. The reason is that there is more to be gained in terms of eliminating uncertainty by granting the agency more power; Congress can take advantage of the agency's expertise. The second principal is the ally principal, which states that, all else equal, Congress will grant more discretion to agencies who share Congress's policy objectives. If they share the same policy objectives, Congress can more freely take advantage of agency expertise; the moral hazard problem is lower. Both the uncertainty principal and the ally principal are subject to qualifications and modifications, but they remain at the core of the study of delegation.

To my knowledge, these moral hazard models do not include the possibility of agency redundancy. There is a large amount of redundancy in government. For example, during the Johnson administration, Senator Ribicoff counted 150 federal agencies providing aid to cities, states, and individuals through 456 different programs.⁹ One survey reports that there

⁸John D. Huber and Charles R. Shipan, *Politics, Delegation, and Bureaucracy*, forthcoming, *Handbook of Political Economy*.

⁹David E. Lewis, *Presidents and the Politics of Agency Design* (2003) at p. 8.

are currently at least 80 means-tested programs (i.e., programs to help the poor) today.¹⁰ There are at least twelve federal agencies that govern food safety and inspection.¹¹ There are numerous agencies engaged in intelligence gathering.¹² Federalism can be viewed as a form of redundancy, with similar services being provided by federal, state, and local governments.

Redundancy models in political science are of two sorts. The first comes from the public administration literature and focuses on reliability.¹³ If we view agencies (or subunits within an agency) as parts of a machine that produces some outcome, redundancy can reduce the likelihood of failure. For example, if two airplane engines each have a 1/1000 chance of failing and failure of one is independent of failure of the other, the chance that both fail is 1/1,000,000. More generally, if the likelihood of failure for each redundant unit is p and the risk of failure is independent across units, the likelihood of failure goes down to p^n when there are n redundant units. Agency redundancy, it is argued, can similarly reduce the chance of failure.

The second argument for agency redundancy goes back to Niskanen's famous argument about bureaucratic control of policy.¹⁴ He starts from the position that agencies can make take it or leave it offers to Congress with full knowledge of the congressional demand function. In this case, agencies will produce too much at too high a cost. He then argued that agency competition would force agencies to reveal information to Congress and, therefore, reduce the ability of agencies to capture rents. Niskanen's model has been widely criticized for its assumption that bureaucrats control the bargaining process with Congress and that bureaucrats want to maximize their budgets. Nevertheless, even with some of these problems corrected, competition might help. This model and the more recent updates, are models of hidden information, not hidden action. Congress uses redundancy to get information about the costs agencies incur not about the actions agencies take.

The economics literature has studied the use of multiple agents as a way to solve moral hazard problems (i.e., hidden action problems). One prominent example, discussed in section

¹⁰Robert A. Moffitt, Welfare Programs and Labor Supply, in Handbook of Public Economics, Vol. 4 (Alan J. Auerbach and Martin Feldstein eds. 2002).

¹¹David E. Lewis, Presidents and the Politics of Agency Design (2003) at p. 8

¹²Anne M. Joseph, The Architecture of Smart Intelligence: Balancing Unification and Redundancy in Agency Design and Congressional Oversight, 94 Cal. L. Rev. (forthcoming 2006); Luis Garicano and Richard Posner, Intelligence Failures: An Organizational Economics Perspective, Journal of Economic Perspectives, (forthcoming).

¹³See, Martin Landau, Redundancy, Rationality, and the Problem of Duplication and Overlap, 29 Public Administration Review 346 (1969).

¹⁴William A. Niskanen, Bureaucracy and Representative Government (1971).

V below, is the use of rank order tournaments. In these tournaments, a principal commits to a total award to be given to a group of agents and divides up the award based on the rank order of outcomes produced by each agent. These models, to my knowledge, have not been incorporated into the literature on the study of agencies.

B. Tax Expenditures

Very little of the literature on delegation or on redundancy has been applied to or even references tax expenditures. This sections makes several observations about tax expenditures.

First, as is well known, tax expenditures can act as substitutes for direct expenditures.¹⁵ As the analysis of tax expenditures in the Administration's Fiscal Year 2007 budget states, tax expenditures "may be viewed as alternatives to other policy instruments, such as spending or regulatory programs."¹⁶ Therefore, any decision to delegate to a line agency must consider the competing or potentially complementary possibility of delegating to the tax agency.

Second, delegation to the tax agency tends to be narrow. The tax law is notoriously detailed and grants the tax agency little discretion. For example, it is hard to imagine the tax law looking like the delegation of authority to the FCC – draft tax regulations that promote the public interest. I will also venture that delegations to the tax agency with respect to tax expenditures tend to be even more narrow than the delegation for tax rules in general. This is a difficult proposition to establish because so many tax expenditures are deeply interwoven into the other tax rules. If one looks in the tax code for the major delegations of discretion, however, they tend to be in areas related to core tax administration. For example, the Treasury Department is delegated authority to write regulations governing the tax rules for filing consolidated returns. It is given abuse of discretion authority with respect to transfer pricing. It is relatively free to create tax forms and to choose audit mechanisms. In contrast, delegations of authority in tax expenditures are usually limited by the exacting detail provided for in the statute. Therefore, I will assume here that the scope of authority given to the tax agency with respect to tax expenditures is narrow.¹⁷

¹⁵See Stanley S. Surrey, *Pathways to Tax Reform: The Concept of Tax Expenditures* (1973), pp. 1-6.

¹⁶Analytical Perspectives, *Budget of the United States Government, Fiscal Year 2007*, Office of Management and Budget, p. 285 (2006).

¹⁷It is important not to overstate how narrow the delegation to the tax agency typically is. Even with narrow delegations, there remains significant discretion. The low income housing tax credit is used as an example below. Although the delegation is relatively narrow in this case, the Treasury has still issued 35 pages of regulations (using tiny print) broken down into 17 subsections with numerous rules, examples, and illustrations. See *Treas. Reg. 1.42-1 through -17*. Moreover, a variety of regulations not issues directly under the low income housing tax credit provision (I.R.C. section 42) affect the use of the credit.

Third, there is a considerable degree of redundancy between tax expenditures and direct expenditures, although this is more true for recently enacted tax expenditures and for smaller tax expenditures. The extent of redundancy, however, is difficult to measure. Many tax expenditures seem clearly redundant but many do not. The nature of the redundancy might be subtle, however, and it is hard to know about every federal program that might overlap. For example, it is unclear whether we should consider the mortgage interest deduction as redundant with the implicit federal guarantee of Fannie Mae and Freddie Mac. Both reduce the costs of mortgages but do so in very different ways. Also, the mere threat of shifting a program to the tax agency can create effective redundancy for some purposes – it might, for example, help solve principal agent problems by threatening discipline for bad behavior.¹⁸ Implicit or threatened redundancy cannot be readily measured.

To get a sense of the extent of redundancy, I examined the list of tax expenditures in the Administration's fiscal year 2007 budget, and attempted find similar direct spending or regulatory programs in the federal budget.¹⁹ The tax expenditure budget is dominated by a handful of large items and only a few of these are clearly redundant with other programs.

The largest single tax expenditure is the exclusion of employer contributions for medical insurance premiums. The projected revenue effect of this expenditure is just under \$900 billion over five years (2007-11). There are also a number of other tax expenditures related to health care, such as the deductibility of medical expenses (\$41 billion over five years), deductions for self-employed medical insurance premiums (\$28 billion), health-care related charitable deductions (\$22 billion), and medical savings accounts (\$18 billion), for a total of more than a trillion dollars in tax expenditures on health care. The government also has enormous direct expenditures on health care through Medicare and Medicaid. The CBO projects that Medicare expenditures from 2007 to 2011 will be almost \$3 trillion and Medicaid during the same period will cost almost another \$2 trillion.

We have clearly split the government's involvement in health care into a number of programs, including several administered by the tax system. The reasons for the split are not clear, and most people believe that the current design is far from desirable. Understanding and designing health care policy is far beyond the scope of this paper. It is sufficient to know that tax expenditures for health care frequently overlap with direct expenditures and that there might be benefits from these redundancies. For example, having multiple programs might allow us to compare costs, generating information.

¹⁸See, Michael Ting, A Strategic Theory of Bureaucratic Redundancy, 47 *American Journal of Political Science* 274 (2003).

¹⁹All of the subsequent numbers for tax expenditures are taken from *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2007*, Office of Management and Budget (2006).

The second largest category of tax expenditures are related to home ownership. The Administration's budget calculates these expenditures in several ways. The traditional way to calculate the tax expenditure is to treat the deductibility of mortgage interest and state and local taxes as tax expenditures. These two plus the exclusion of gain on sale add up to \$864 billion over five years. The alternative is to compute an imputed rental value and treat the non-taxation of this amount as a tax expenditure. This plus the exclusion of gain on sale adds up to \$528 billion over five years. Either way, tax expenditures for home ownership appear to be substantial.²⁰ There are also numerous other, smaller, tax programs relating to home ownership. For example, there are special rental loss rules, accelerated depreciation for rental housing, and special exemptions for interest on mortgage subsidy bonds.

There are fewer redundancies for housing than for health care. There are a large number of programs for low income housing (discussed below), but the major home ownership tax expenditures apply largely to middle or high income individuals. There are fewer federal programs that are redundant for these individuals. Tax expenditures appear to be the major programs. One possible redundancy is the implicit federal guarantee of Freddie Mac and Fannie Mae debt. This reduces the costs of conforming mortgages, so it has an effect similar to the mortgage interest deduction. Local zoning and environmental regulations obviously affect housing prices, but it is not clear that these are redundant with or particularly interact with the tax benefits provided to housing.

The next major category of tax expenditures is retirement savings. There are a number of expenditures that are listed separately but that are similar. The exclusion of employer plans (\$228 billion) and 401(k) plans (\$232 billion) and life insurance interest (\$130 billion), and IRA's (\$38 billion) are the major tax programs, adding up to \$629 billion over five years. These are potentially redundant with social security, which is expected to cost \$4.7 trillion from 2007 to 2011. The features of the tax incentives and Social Security are quite different, but the goals are similar. The old analogy of retirement savings to a three-legged stool illustrates the redundancy – the three legs (private savings, pensions, and Social Security) work together to ensure an adequate retirement, at least the theory went.

²⁰Interpreting these numbers is not easy. Whether there is an incentive to own a home depends on the relative rate of tax on other investments. The President's budget lists \$357 billion in tax expenditures for accelerated depreciation for machinery as well as miscellaneous tax expenditures for other investments. In considering the incentives, we should not count the full amount of both of these expenditures as they offset one another. For example, if depreciation were fully accelerated so as to allow an immediate deduction for purchases of machines, then both housing and machines would not be subject to tax at all and there would be no distortion in the choice of investing between the two. It would not make sense to say that there is a federal program designed to encourage home ownership in this case. Whether the numbers should be reported on a tax expenditure list is another matter – the purpose of the list may be to provide information about what is or is not tax, not to list relative incentives provided by the tax system. The concern here, however, is not inclusion on a list but whether there is actual redundancy.

Moving down the list, the total expenditure for the charitable deduction is \$243 billion over five years. (The budget breaks down the charitable contribution into categories and does not present the \$243 billion as a single number.) Consider the deduction for contributions to educational institutions, which costs \$23 billion over a five year period, or \$4 billion in 2007 alone. The federal government also makes direct grants to postsecondary educational institutions. The total grants in 2003 for postsecondary institutions and research was \$58.5 billion.²¹ This number can be compared to either the \$4 billion in education-related charitable deductions or to the total tax expenditures for higher education, which in 2007 are expected to total \$16 billion.

It is not clear how or whether the charitable deduction is redundant with related direct expenditures. It is possible to imagine the federal government deciding to eliminate the NIH and the NSF and increasing the deduction for contributions to educational institutions, or vice versa, but this seems unlikely. One explanation for the charitable deduction is that it allows individuals with information about the performance of charities to direct federal resources based on that information. Direct research grants are also based on information collected by the government. One possible explanation for the mix, therefore, is that information about the performance of educational institutions is held by different parties and we want to delegate the task of directing educational resources to the parties with the information. It would not be a case of redundancy. It is as if a company hired an engineer and a marketer to work on the same product. Each has specialized information and they are not redundant. If this is the case, the decision to use a tax expenditure for funding education reverts to the specialization, coordination story.

In contrast to the programs discussed above, the smaller and newer tax expenditures are more likely to be directly comparable to other federal programs. That is, the large and old tax expenditures just discussed have possible redundancies with other programs but they tend to be indirect. It is possible that prior to Surrey, tax expenditures were not clearly thought of as social programs, so their interaction with the spending side of the budget was murky. Recent tax expenditures tend to look more like direct competitors with other programs. There are a large number of such programs. Section _ below will provide a more detailed analysis of the low income housing tax credit. Here, I give the bare outlines of several programs to get a sense of the redundancy.

The Earned Income Tax Credit (EITC) is one of numerous federal programs to aid low income individuals. In 2002, the federal government spend roughly \$373 billion on more than eighty means-tested programs in the United States. State governments spend another \$149 billion on welfare programs, for a total of \$522 billion on welfare-type programs in a

²¹See William C. Sonnenberg, Federal Support for Education, FY 1980 to FY 2003, National Center for Education Statistics (2004), available at <http://nces.ed.gov/pubs2004/2004026.pdf>. The \$58.5 figure in the text is the sum of the “postsecondary” and “research at educational institutions” rows in the table on p. iv, in the 2003 column.

single year. The major programs are Medicaid, Supplemental Security Income (SSI), Temporary Assistance for Needy Families (TANF), the EITC, and Food Stamps. Medicaid swamps the other programs in size, although much of it is devoted to the aged and disabled, which is a slightly different population than the other programs assist. SSI is similar in regard. After Medicaid and SSI, the EITC is the largest federal program for assisting the poor, followed by Food Stamps and TANF. (Depending on the measure, subsidized housing is larger than TANF and smaller than food stamps.)²²

There is substantial overlap in these programs, particularly among the EITC, TANF, and food stamps. They each have slightly different parameters, serving overlapping but not exactly the same populations, run by different agencies, and involving a different mix of federal, state, and local control. For example, the EITC only applies to those with wage income and initially increases as wages increase. It is administered by the Internal Revenue Service with no state involvement. TANF is a federal block grant to the states with limitations on how states can use the money.²³ The Department of Health and Human Services administers the program at the federal level. States must also contribute to the program and administer the program through state welfare agencies. States have used their TANF funds to provide income assistance, child care, education, transportation or other family services. The key restrictions on states are the work requirement and the time limit. Half of the families receiving TANF must work at least 30 hours a week. In addition, no family may receive TANF for more than five years (with some wiggle room). The work requirement makes TANF resemble the EITC, but it is not explicitly conditioned on work in the same way. Food Stamps is administered jointly by the Department of Agriculture and state agencies.²⁴ The Food Stamp Program, unlike TANF or the EITC, is universal: all that is required is that monthly income and assets be below certain thresholds. Food Stamps provide vouchers for the purchase of food rather than cash, but given that the vouchers are lower than the typical monthly food budget, they are similar to cash.

These programs are highly redundant. They provide similar types of assistance to similar populations. Weisbach and Nussim compared food stamps and the EITC, concluding

²²Robert A. Moffitt, *Welfare Programs and Labor Supply*, in *Handbook of Public Economics*, Vol. 4 (Alan J. Auerbach and Martin Feldstein eds. 2002).

²³For an overview of TANF, see Office of Family Assistance, *Temporary Assistance for Needy Families, Sixth Annual Report to Congress* (November 2004), available at www.acf.hhs.gov/programs/ofa/annualreport6/ar6index.htm

²⁴See David Weisbach and Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 *Yale L.J.* 955, 997-1023 (2004) for a summary and analysis of the Food Stamp Program.

that the EITC was superior on almost all grounds.²⁵ If, however, there are reasons for having redundant programs, it might be the case that retaining food stamps is desirable.

The low income housing tax credit (LIHTC), at \$24 billion over five years is the major tax expenditure for the creation of low income housing. It is also one of the largest federal housing programs. The credit attempts to stimulate the supply of low income housing by providing developers a tax credit over a 10 year period with a fixed present value (depending on various factors, potentially up to 70 percent of cost). Renters must meet certain income requirements and rents are capped as a percent of income. The Department of Housing and Urban Development has little involvement in the program. Instead, it is administered at the federal level by the Internal Revenue Service and at the state or local level by state or local housing agencies (who, for example, have the power to allocate the limited amount of tax credits to individual projects). More than a million units have been authorized, and about 700,000 units have been built under the LIHTC.²⁶

There are a large number of other federal housing programs that are redundant with the LIHTC. HUD lists at least 10 programs that support low income housing. The Ways and Means Committee Green Book lists 17 programs designed to provide direct housing assistance to the poor, not including the LIHTC.²⁷

Chief among the direct spending programs is the Section 8 rental assistance program (the Housing Choice Voucher Program). This program is a demand-side program. Tenants are given vouchers which they can use to help pay rentals on units chosen by the tenant in the private market. Local housing authorities are responsible for distributing the vouchers and, subject to constraints, setting the local parameters for their use. The section 8 program is very large, estimated to cost almost \$16 billion in 2007.

The other two most substantial HUD programs are the HOME program and the community development block grant program. Both these programs grant funds to local jurisdictions which may use the funds for a variety of purposes. Under the HOME program, which expected to cost almost \$2 billion in 2007, states may fund housing activities based on local housing needs. Rental housing units receiving HOME funds must meet certain rent and occupancy requirements. This portion of HOME funds, therefore, looks highly redundant with the LIHTC. Block grants are provided to cities and counties to carry out activities

²⁵David Weisbach and Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 *Yale L. J.* 955 (2004).

²⁶Edgar O. Olsen, *The Cost-Effectiveness of Alternative Methods of Delivering Housing Subsidies*, available at www.virginia.edu/economics/papers/olsen/costeffectivenesssurvey.pdf at p. 3.

²⁷Committee on Ways and Means, U.S. House of Representatives, *Overview of the Federal Tax System*, 108th Cong. 2d Sess. (2004), Appendix K-11.

directed toward revitalizing neighborhoods, economic development, and providing improved community facilities and services.²⁸

Like with welfare programs, housing programs are significantly redundant. Also like with welfare programs, most of the housing programs have slightly different parameters or are administered by different agencies. The major split in the housing programs is between demand side programs, such as the Section 8 vouchers, and supply side programs, such as the LIHTC. Section VI below will discuss whether theories supporting redundancy can explain these different approaches.

II. Moral Hazard with No Redundancy

This section will consider how moral hazard considerations change the choice of which agency will be delegated a task, assuming for now that a single agency will perform the task. I will assume here that there is no adverse selection problem but there is a moral hazard problem: Congress knows the costs and benefits of having a given agency perform a task but cannot observe the effort that an agency puts in if chosen.

The moral hazard literature does not, as far as I know, say anything about the choice of an agent. One suspects that the same considerations that would be used without moral hazard problems. Weisbach and Nussim argued that the choice of an agency absent moral hazard (or adverse selection problems) should be based on how specialized an agency is in a given task and how the task can benefit from coordination with programs run by that agency or by other agencies.²⁹ Moral hazard considerations easily fits into this analysis.

Suppose that there is some trade-off between coordination, specialization, and other similar factors and that it favors the use of a line agency over the tax agency because of its expertise. Say there are offsetting benefits to using the tax system, but these are outweighed by the expertise of the line agency. For example, we can imagine that the tax agency has advantages with respect to economies of scale and information processing but the line agency has advantages in terms of expertise in the subject matter.

Now add moral hazard concerns regarding the decision to delegate. As in standard models, Congress will trade off the benefit of expertise (the uncertainty principal) against bias (the ally principle). If this trade-off involves a wide scope of delegation to the agency, the story stays the same. Suppose, however, that the optimal delegation decision is, because of bias, for Congress to give an agency very little freedom to make policy. In this case, there is little to be gained from agency expertise, potentially changing the balance between the use

²⁸See 42 U.S.C. 5301 for a statement of the general purpose of the block grant program. See 42 U.S. C. 5305 for a list of funded activities.

²⁹David Weisbach and Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 *Yale L. J.* 955 (2004).

of the tax agency and the line agency. More generally, the trade offs in considering the choice among agencies has to be performed in light of the relative freedom to use expertise that Congress would be willing to give each agency. Because moral hazard considerations will alter the freedom that Congress is willing to give to agencies, it can change the balance among specialization, coordination, and the like.

The argument is parallel to the basic delegation argument used in the political science literature, summarized in Part I.A above. In that literature, Congress was facing a “make or buy” decision – it can purchase a policy from an agency at the cost of giving the agency discretion, or it can make the policy itself. The analysis here adds the possibility of Congress using the tax agency as part of the “make” decision. If it chooses to make the policy itself because the relevant agency’s policies are too far from Congress’s policies, it can use the tax agency for implementation.

To give a concrete (but hypothetical) example, suppose that the EPA has significant expertise with respect to environmental policy and, therefore, in a choice between it and the IRS, the EPA would be the preferred agency. If, however, a conservative Congress is unwilling to give a liberal EPA very much discretion to use its expertise, the balance may change. Moral hazard problems take away some of the expertise advantage of the EPA.

To confirm this hypothesis empirically would require more work, but anecdotes abound. Thus, for example, we see a tax incentive as opposed to a direct grant for environmental remediation at a time when Republicans control Congress and Democrats control the administration.³⁰ We see a low income housing tax credit at a time when Congress was significantly more liberal than the administration (Democrats controlled the House and the Republicans in the Senate were generally more moderate than the Republicans in the Reagan Administration). During the Clinton era, there was a very strong deviation between congressional and agency preferences, and we saw a huge growth in tax expenditures during that time. Although the claim needs to be tested, it has at least surface plausibility.

One criticism is that the analysis did not say anything about the possible bias in the tax agency. The tax agency might have its own biases, such as trying to maximize tax revenues. Congress, therefore, faces the choice of two biases, that of the line agency and that of the tax agency. Moreover, to the extent the tax agency is given discretion, it may be likely to make mistakes. These considerations reduce the power of the result but should not effect the basic conclusion. Delegation to a line agency is intended to take advantage of expertise. If moral hazard considerations demand a narrow delegation, this shifts the relative balance toward the tax agency.

³⁰See section 198 of the Internal Revenue Code.

I predict, therefore, that as preferences of Congress and either the president or the relevant agency get further apart, we should expect greater use of tax expenditures. That is, as the ally principal weakens, the relative advantage of the tax agency increases and we should see more delegations to the tax agency.

III. Failsafe

Suppose now that there is redundancy but no imperfect information: Congress knows the relevant attributes of the agencies and can observe their performance. The benefit of redundancy in this case is that it increases reliability in an engineering sense.³¹ For example, suppose that there are two agencies with independent likelihoods of failing of 50%. The use of both agencies reduces the likelihood of failure to only 25%. More generally, if each of n agencies has an independent likelihood of failure of p , the likelihood that at least one will succeed is $1-p^n$. As n increases, the likelihood of failure rapidly decreases, although with decreasing marginal returns from adding additional agents. The problem of redundancy simply becomes one of setting the marginal cost of an additional agent to the benefit from the marginal decline in the likelihood of failure.³²

Redundancy in this sense is a close analogue to diversification. By spreading projects among a number of agencies, we can diversify the risk of failure. If diversification were free or even very cheap, it would make sense to have broadly diversified programs, just like it makes sense to have broadly diversified financial portfolios because diversification of financial portfolios is cheap.

Unlike in the financial asset case, however, programs may benefit from economies of scale. For example, expertise can be viewed as an economy of scale because the cost of obtaining expertise can be spread out in large programs. If expertise is necessary, and it usually is,³³ most programs will have economies of scale. Other economies of scale may

³¹Martin Landau, Redundancy, Rationality, and the Problem of Duplication and Overlap, 29 Public Administration Review 346 (1969).

³²Landau and subsequent literature viewed the problem essentially as an engineering problem, with the agents acting as automatons. Martin Landau, Redundancy, Rationality, and the Problem of Duplication and Overlap, 29 Public Administration Review 346 (1969). Michael Ting, A Strategic Theory of Bureaucratic Redundancy, 47 American Journal of Political Science 274 (2003), points out that if agents know that their effort is duplicated, they may shirk, hoping someone else is successful in the task. If shirking cannot be observed by the principal, the benefits of using multiple agents will be lower than the engineering approach would predict. Although in Ting's model there is hidden action (Congress cannot observe the shirking by agencies), it remains at its core an engineering model. Congress, for example, does not use any of the standard incentive schemes found in the economics literature to solve shirking problems when there are multiple agents. See, e.g., A. A. Alchian and Harold Demsetz, Production, Information Costs, and Economic Organization, 62 American Economic Review 777 (1972); and Bengt Holmstrom, Moral Hazard in Teams, 13 Bell Journal of Economics 324 (1982).

³³Expertise is, after all, the reason for delegation in the political science models of delegation.

arise because individuals may have lower compliance costs when they have to deal only with a single agency. Compare an individual seeking benefits having to visit six different offices, one for each different kind of benefit (housing, meals, transportation, etc.) to an individual that can receive all the benefits from a visit to a single office. Thus, the optimal number of redundant agencies would balance the benefits of diversification with the increased costs of additional agencies.

Some authors have argued that redundancy should be limited because, while it decreases the chance of failing to act, it increases the chance of acting when we should not. That is, it trades off type I and type II errors. For example, Heimann argues that this is the case for NASA's decision making regarding space shuttle launches.³⁴ Nancy Staudt has argued that this same effect can occur in the welfare context.³⁵ Bendor considers these issues in the context of metropolitan transportation systems.³⁶ The benefit of redundancy, these authors argue, depends on how we weigh the two types of error. For example, in national intelligence, we have to weigh the chance of not catching terrorists with the chance of arresting innocents. In launching the space shuttle, failing to launch when safe is a problem but the costs of launching when it is not safe are much larger.

In the tax expenditure context, the type I/type II error analysis does not seem appropriate. Most decisions are not be binary. Instead, they involve how much money a particular activity receives. As is well known, diversification can reduce risk without changing expectations.³⁷ Thus, if we keep the expected payment for an activity the same but make the payment using a larger number of smaller grants, we might be able to reduce *both* type I and type II errors. Moreover, if one type of error, type I or II, is worse, we can change the expected payment to balance them.

Consider welfare programs, for example. Suppose that we want to deliver \$100 to an individual and that any agency assigned the task has a 50% probability of failing (and say, burning the money). If we assign the task to a single agency, we would have to let it grant the individual \$200 so that on average, the individual gets \$100. The single agency has both type I and type II errors; sometimes the individual gets \$0, sometimes the individual gets \$200. We could alternatively assign two agencies, allowing each of them to make grants of \$100. If they have independent risks of failure, the risk has been cut in half (as measured by the variance). *Both* type I and type II errors are reduced while the expected payment to the

³⁴C.F. Larry Heimann, Understanding the *Challenger* Disaster: Organizational Structure and the Design of Reliable Systems, 87 *American Political Science Review* 421 (1993).

³⁵Nancy Staudt, Redundant Tax and Spending Programs, *Northwestern L. Rev.* (forthcoming 2006).

³⁶Jonathan B. Bendor, *Parallel Systems: Redundancy and Government* (1985).

³⁷See Brealy, Myers, and Allen, *Principles of Corporate Finance* (2005).

individual remains the same. Both type I and type II errors would be cut further by using three agencies, and so forth, with declining marginal benefit from adding additional agencies. Just like with diversification, redundancy does not create a trade off between type I and type II errors in this type of program. Therefore, I do not think the type I, type II analysis is relevant. Instead, we should think about the benefits of redundancy like we think about diversification.

The redundancy as diversification theory modifies the basic specialization/expertise story because agencies can bring an additional benefit to the table, diversification. The key to diversification is that the risks be independent. To the extent there are common risks, diversification does not help. If a second agency fails whenever the first agency fails (and succeeds when the first agency succeeds), there is no benefit to adding the second agency. If, on the other hand, an agency that would otherwise not be chosen brings an ability to reduce risk of failure through diversification, delegation of a portion of the policy to that agency might be wise.

There is a reasonable possibility that the tax agency will bring an independent source of risk to many policies. The reason is that its mission and expertise are so different than a typical line agency. Thus, even if the tax agency would not otherwise be chosen, it might make sense to add the tax agency to get additional diversification. It would be like adding a counter-cyclical stock to a portfolio.³⁸

This view of the tax agency as a counter cyclical stock fits with James Q. Wilson's view of agencies as protecting their turf.³⁹ The tax agency's turf is likely to be with respect to traditional tax collection and tax policy. It is unlikely to have strong views about other programs, such as environmental, energy, housing, or education programs. Moreover, its expertise in processing paper and measuring income may be significantly different than other agencies. With no strong views and a different type of expertise, adding the tax agency may add an element of diversification not otherwise available.

Making a prediction based on this theory is more difficult than for the "single agency, moral hazard" case. The problem is determining when the tax agency adds an independent source of risk. As far as I know, there is no systematic measurement of the risk of failure for particular programs, unlike for say, stocks, where we can measure covariance of stock prices for various states of the economy. It may not be possible, therefore, to make a prediction that

³⁸The considerations are somewhat more complex than in the portfolio context because the assumption is that the tax agency would be as good as the other agency or agencies at performing the task. Thus adding the tax agency creates diversification but reduces expected performance. In the portfolio context, markets are usually assumed to be efficient which means that all stocks perform as well as all other stocks. A more exact stock portfolio analogy to the agency choice situation would be if a stock added diversification but was overpriced (and, therefore, expected to underperform).

³⁹James Q. Wilson, *Bureaucracy* (1989).

can be verified by a large n empirical study. Instead, case studies may be the best that we can do.

Consider, for example, welfare programs. Staudt, following Bendor, argues that the multiplicity of welfare programs can be seen as a means of reducing risk.⁴⁰ The claim is that there are multiple theories of poverty, any of which could be right. Thus, poverty might be caused by cultural values transmitted from one generation to the next, it might be caused by class divisions that somehow limit opportunity, it might be a natural result of a market economy, or it might result from any number of other conditions. If poverty is a natural result of a market economy, direct transfers to the poor might increase welfare, but if it is a result of cultural problems, direct transfers may not be desirable. Because we do not know which of these (or other) theories is correct, we might want to diversify welfare programs across these theories. In this account, the tax agency is not particularly counter-cyclical. Instead, it is merely one of the n-best agencies under theories of expertise and coordination.

One problem with this account is that it seems a weak justification for a permanent, or even very long-term use of redundancy. At some point, it would be desirable to sort out which theory or theories are correct and eliminate the wasteful programs. It has, after all, been 40 years since the war on poverty. Moreover, when there are multiple causes of poverty, the wrong program may not only be wasteful, it may be positively harmful. For example, suppose that an individual is poor either because of market conditions or because of moral hazard concerns (i.e., the person does not work because of the availability of support payments). If the problem is market conditions, a direct payment improves welfare. If it is because of moral hazard, a direct payment may *reduce* welfare because it makes the moral hazard problem worse – the payment may be worse than wasted. Diversification would not work here. Instead, we have to try to sort out the cause of poverty for different types of individuals. Thus, the application of redundancy theory in the case of welfare programs requires great care.

More generally, none of the examples of redundancies in tax expenditures listed above can readily be explained using the diversification theory. Although the theory is plausible, we should have at least a few good examples before accepting it.

IV. Adverse Selection

Niskanen famously argued that agency competition can improve outcomes.⁴¹ Niskanen, however, was not arguing for competition in neoclassical economics sense. Congress interacting with multiple agents is not like a person making consumption choices in

⁴⁰Nancy Staudt, Redundant Tax and Spending Programs, Northwestern L. Rev. (forthcoming 2006); Jonathan B. Bendor, Parallel Systems: Redundancy and Government (1985), at 16-17.

⁴¹William A. Niskanen, Bureaucracy and Representative Government (1971).

the anonymous market with free entry for competitors. Instead, the relationship is primarily a contractual relationship subject to information failures such as moral hazard and adverse selection. In Niskanen's model, competition reduces adverse selection – it acts to reveal information about agencies. I will argue in this section that adverse selection concerns are unlikely to be a reason for using tax expenditures.

Niskanen assumed that agencies are budget maximizers that know the legislative demand function and have the power to make take it or leave it offers to the legislature. The legislature does not know the agency's true cost, hence the adverse selection problem. If the agency is a monopolistic supplier to the legislature, the agency will always choose an output on the legislature's demand function that above the social optimum.

Niskanen argues that introducing competition reduces the adverse selection problem. Agencies have an incentive to reveal their true costs as part of the bidding war to obtain resources. Output is still above the social optimum, but agency rents are bid away, increasing social welfare as compared to the single agency case.

There are two serious criticisms of Niskanen's theory, both of which confound the ability to make predictions about competition. The first major criticism is that Niskanen assumed that agencies completely dominate the policy making process. Many commentators have pointed out that Congress has many tools at its disposal to inform itself and to discipline agencies. Congress rather than agencies should be viewed as dominant. Miller and Moe⁴² are early followers of this view. They allow the legislature to use its position as monopsonist purchaser of the output of the agency to obtain better outcomes than in the Niskanen model. Thus, the legislature might be able to conceal its demand from the agency and require the agency to make an initial offer. Under their assumptions, the legislature can obtain close to the social optimum (depending on factors such as how well it can conceal its demand function). Agency competition in their model, like in the Niskanen model, forces agencies to reveal their costs. They imagine a monopolistic agency when competition is introduced and conclude, "a major effect of this new competition is to bring about – e.g., through supplier bidding or other market-like mechanisms – revelations of information about the actual costs of supply . . ."⁴³ Thus, even when agency power is reduced relative to the assumptions in Niskanen, competition still solves the adverse selection problem.⁴⁴

⁴²Gary J. Miller and Terry M. Moe, *Bureaucrats, Legislators, and the Size of Government*, 77 *American Political Science Review* 297 (1983).

⁴³Gary J. Miller and Terry M. Moe, *Bureaucrats, Legislators, and the Size of Government*, 77 *American Political Science Review* 297, 310 (1983).

⁴⁴Casas-Pardo and Puchades-Navarro present a model similar to Miller and Moe. Jose Casas-Pardo and Miguel Puchades-Navarro, *A Critical Comment on Niskanen's Model*, 107 *Public Choice* 147 (2001).

The problem with using Miller and Moe's theory is that it does not make any predictions about competition. In particular, agency competition produces the same results that they predict arise when the legislature is able to conceal its demand function from a single agency. We would in theory expect Congress to use competition when it cannot conceal its demand function, but it not clear how to know when this is the case.

A second criticism of Niskanen is his claim that agencies maximize their budgets. If they do not maximize their budgets, theories of competition must be revised. James Q. Wilson's book "Bureaucracy" is a leading example of this argument.⁴⁵ He uses thick, descriptive analysis of agencies to argue that they are often more interested in autonomy than in increasing their turf.⁴⁶ They do not seek to compete with other agencies. For example, a study of the National Park Service and the U.S. Forest Service found find a lack of competition between the agencies despite their overlapping jurisdiction.⁴⁷ Another study found that the Office of Management and Budget and the Congressional Budget Office do not compete with respect to their budget predictions.⁴⁸

To the extent we can rely on these sort of descriptive accounts of agency behavior to dispute or verify Niskanen's claims, it would seem likely that the Internal Revenue Service does not compete with respect to tax expenditures. It is very protective of its turf with respect to tax collection, but it does not want to administer most tax expenditures. Consistent with Wilson, these programs are not part of their mission, and it views these programs as diluting their ability to accomplish their mission.⁴⁹

Moreover, I have been unable to find examples where the Treasury Department is able to break down its costs for administering a program. Thus, Weisbach and Nussim were only able to obtain very crude estimates of the costs to administer the earned income tax credit.⁵⁰ I am not aware of any estimates for most of the redundant programs, particularly smaller

⁴⁵James Q. Wilson, *Bureaucracy* (1989).

⁴⁶James Q. Wilson, *Bureaucracy* (1989) at p. 189.

⁴⁷Todd Kunioka and Lawrence S. Rothenberg, *The Politics of Bureaucratic Competition: The Case of Natural Resource Policy*, 12 *Journal of Policy Analysis and Management* 700 (1993).

⁴⁸George A. Krause and James W. Douglas, *Does Agency Competition Improve the Quality of Policy Analysis? Evidence from OMB and CBO Fiscal Projections*, 25 *Journal of Policy Analysis and Management*, 53 (2006). The authors found that the introduction of the CBO did not lead to an improvement in predictions by OMB. It is not clear, however, whether this finding supports their conclusion because the predictions might have been as good as possible prior to the introduction of competition.

⁴⁹James Q. Wilson, *Bureaucracy* (1989).

⁵⁰David Weisbach and Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 *Yale L. J.* 995 (2004).

programs. For these reasons, the tax agency does not seem like a likely candidate to be a direct Niskanen-type competitor.

To illustrate, consider the low income housing tax credit. The tax agency does not and cannot break down the costs of administering the credit. Because Congress cannot compare the cost of using the tax incentive with the cost of direct HUD grants, it is difficult to see how adding the tax incentive creates competition to reveal costs. Moreover, the tax agency does not particularly seem to want to administer the credit, so it has no incentive to compete for the program.

Even if we thought that the tax agency was competing for the program, it is not clear what we should expect to observe. Introducing the low income housing tax credit might not change HUD costs or output. We simply cannot tell whether they are competing in the Niskanen or Miller and Moe sense because we cannot distinguish competition from a demand concealing legislature.

Given that the theory does not make clear predictions, it is difficult to reject it. The opposite of something without implications also does not have implications. Nevertheless, the tax agency does not seem to want most tax expenditures – they are not part of its turf. Moreover, the tax agency cannot break out the costs of administering most tax expenditures. Therefore, the use of tax expenditures to reduce adverse selection problems seems unlikely.

V. Moral Hazard with Redundancy

As far as I can tell, the political science literature has not discussed the possibility that redundant agencies can reduce moral hazard problems. For example, the most well known models of delegation in the political science literature, such as Epstein and O'Halloran, do not consider the possibility of multiple agents.⁵¹ It would seem to be a natural solution to the moral hazard problem – competition is well known to increase incentives to work. This section will explore the problem of moral hazard with multiple agents and argue that moral hazard arguments do not explain the use of tax expenditures (except to the extent discussed in Part II above, concerning single agents).

The possibility of multiple agents has a long history in the economics literature, sufficiently so that the problem occupies an entire chapter in the most recent textbook on contract theory.⁵² I cannot do justice to the economics literature here and, therefore, will

⁵¹David Epstein and Sharyn O'Halloran, *Delegating Powers, A Transaction Cost Politics Approach to Policy Making under Separate Powers* (1999). Michael Ting, *A Strategic Theory of Bureaucratic Redundancy*, 47 *American Journal of Political Science* 274 (2003) is an example of multiple agents with hidden action but he does not permit the legislature to use any of the standard incentive mechanisms used to solve this problem. It is really a reliability model, not a moral hazard model.

⁵²Patrick Bolton and Mathias Dewatripont, *Contract Theory* (2005), chapter 8.

confine myself to one of the major examples of how multiple agents can help solve moral hazard problems.

Recall the basic intuition behind the moral hazard problem. A principal wants to hire an agent to perform a task. The principal can observe the outcome but cannot observe the agent's actions. (If the agent's actions and outcomes were perfectly correlated, the principal could infer the agent's actions from outcomes, and there would be no moral hazard problem.) If outcomes and actions are not perfectly correlated, however, the principal cannot know for sure whether the agent has done its best. Think about moral hazard in the insurance context – taking care reduces the risk of an accident but doesn't eliminate it. Insurance companies cannot know whether care has been exercised when there has been an accident (or whether care was not exercised when no accident occurs). The goal is to design a contract that gives the agent incentives to work hard (or take care, or whatever).

The simplest such contract is to assign all the benefits and all the losses from outcomes to the agent. The agent then has all the correct incentives. In the usual model, however, agents are assumed to be risk averse, principals risk neutral (or at least less risk averse than the agent). Therefore, it makes sense for the principal to absorb some of the risk and the optimal contract is a balance between providing incentives to the agent and allocating risk to the right place.

Having multiple agents can help solve this problem. One classic example, which I will use here, is the theory of tournaments.⁵³ Suppose that a principal has multiple agents, each risk averse, as above, so that if only one were to perform the task, the principal could not use sufficiently high powered incentives to ensure optimal performance. Also, suppose that the risk of bad outcomes is common among all the agents. By paying the agents based on the rank order of performance, the principal can reduce the agents' exposure to the common risk. Suppose, for example, all agents perform badly. It is likely because of the common risk turned out badly. If payment is based on rank order and not on outcomes, the agents are protected – they still get paid the same. The same holds if all outcomes are good. This might be because of good luck. Once again, payment based on rank order can eliminate this risk because they do not get an extra bonus for their good luck. So long as there is a common shock among all the agents, a rank order system rewards effort and not luck. Thus, the reason we might want to base an agent's incentive scheme based in part on the performance of other agents is to filter out risk rather than to induce competition.⁵⁴ Once risk is filtered out, higher powered incentives can be used, thereby creating an incentive for effort.

⁵³See Edward P. Lazear and Sherwin Rosen, Rank-Order Tournaments as Optimum Labor Contracts, 89 *Journal of Political Economy* 841 (1981); and Jerry R. Green and N. Stokey, A Comparison of Tournaments and Contracts, 91 *Journal of Political Economy* 349 (1983).

⁵⁴Bengt Holmstrom, Moral Hazard in Teams, 13 *Bell Journal of Economics* 324 (1982).

This theory is powerful and potentially explains many incentive schemes. A basic problem in applying this type of theory to government agencies, however, is explaining why incentives look so low powered in the public sector. The rewards of succeeding in the public sector are small compared to the reward in the private sector – public servants cannot become rich by doing their job well. We especially tend not to see large cash awards like those imagined in the tournaments literature. To be sure, Congress has ways to reward and punish agencies, through such things as budgets, hearings, and the like.⁵⁵ Moreover, employees within agencies can be motivated by the prospect of promotions and the consequent wider degree of policy control. Nevertheless, without large cash awards, at least on first approximation we might say that the incentives on bureaucrats tend to be low powered.⁵⁶ Any theory of the use of multiple agents has to come to grips with this basic phenomenon.

For example, compare the delegation problem modeled by Epstein and O'Halloran with the more traditional principal agent literature in economics.⁵⁷ Epstein and O'Halloran limit congressional choice to setting the scope of delegation. They cannot control agency pay or link it to outcomes, as is done to solve traditional principal agent problems. Even if there are reasons to limit bureaucratic pay directly, one can imagine indirect ways to create incentives on agencies. But in their model, Congress cannot even indirectly reward the agency, such as through assignment of future tasks, or indirectly punish the agency, such as through embarrassing hearings, the imposition of unpleasant future tasks, or the reduction of perks. The principal agent contract is limited to low (actually zero) powered incentives.

The best explanation of the use of low powered incentives that I have seen is the problem created when an agent is assigned more than one task. Holmstrom and Milgrom consider an agent with more than one task where one task has observable output and one does not.⁵⁸ The agent's preferences do not coincide with the principal's preferences, and the principal must set up an incentive scheme for the agent. Holmstrom and Milgrom argue that if the result of one task is poorly observable, the incentive scheme for the other, observable task must be low powered to avoid diversion of effort.

⁵⁵For a summary of the literature arguing for "congressional dominance," see Dennis Mueller, *Public Choice III*, at 386-388 (2003).

⁵⁶Tirole's analysis of the organization of government starts with this same observation. See Jean Tirole, *The Internal Organization of Government*, 46 *Oxford Economic Papers* 1, 3-6 (1994).

⁵⁷David Epstein and Sharyn O'Halloran, *Delegating Powers, A Transaction Cost Politics Approach to Policy Making under Separate Powers* (1999).

⁵⁸Bengt Holmstrom, and Paul Milgrom, *Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design*, 7 *Journal of Law, Economics and Organization* 24 (1991).

Avinash Dixit illustrates this point by examining the incentives on university professors.⁵⁹ Suppose that research output is highly observable but that teaching output is not. Teaching might not be observable because student evaluations may not reflect quality, because the value of a particular class might be swamped when students take many classes, or because there may be a significant time lag between student performance in life tasks and teaching. The university can impose high powered incentives for research because output is observable, but it cannot for teaching, because output is not observable. If the university attempted to solve principal agent problems by giving high powered incentives for research, university professors would then shirk on teaching. Thus, the university is stuck giving relatively low powered incentives for both tasks.

Using high powered incentives for a bureaucratic agency might have similar problems. A typical agency has hundreds of tasks. Many agency outputs are not observable but some are. The use of high powered incentives for observable tasks may divert attention away from equally important tasks that are less difficult to observe. Even in the case of an agent with a single task, there may be competing values that must be considered in performing the task and the use of high powered incentives for one value would dilute the other values. Thus, for example, a high powered incentive on a prosecutor for convictions might reduce incentives for prosecutors to protect other values, such as due process. Therefore, Congress may be reluctant to use high powered incentives for most agency tasks.⁶⁰

The use of tournaments would run directly contrary to the need for low powered incentives. For example, where there are common shocks, the use of rank order tournaments allows elimination of risk from the shock, which in turn allows higher powered incentives for work effort. If higher powered incentives are off the table for other reasons, there may be no benefit to using tournaments. It might be possible to use tournaments with low powered incentives, but the benefits might not be worth the cost. If this is the case, redundancy in government tasks cannot be explained through multiple-agent moral hazard theories.

These arguments apply directly to tax expenditures. The use of tax expenditures might be seen as a method of creating high powered incentives on other agencies. We do not, however, observe these high powered incentives in the government, possibly because of the problem of using high powered incentives when an agent has multiple tasks. Thus, this reason is unlikely to explain the use of redundant tax expenditures.

Finally, note that to the extent we think this theory explains the use of multiple agencies, its predictions are exactly the opposite of those of the reliability/diversification

⁵⁹Avinahs K. Dixit, *The Making of Economic Polity* (1996) at p. 96.

⁶⁰An alternative theory for the lack of high powered incentives on agencies is paying large sums for public spirited work actual dilutes desirable motivations. See, e.g., Bruno Frey, *A Constitution for Knaves Crowds Out Civic Virtues*, 107 *The Economic Journal* 1043 (1997).

theory. Tournaments are valuable when agencies experience common shocks. Diversification is valuable when shocks are independent. If both theories hold, it will be difficult to make predictions, such as when we should expect to see an increase in redundancy.

VI. Application – The Low Income Housing Tax Credit

This section will consider the low income housing tax credit (LIHTC), which is one of the major federal housing programs currently in force. The analysis here is only preliminary and a much deeper study of housing policy is needed to make firm conclusions.⁶¹

The LIHTC overlaps with several other federal housing programs, particularly rental vouchers and block grants. Some housing experts have attributed the multiplicity of housing programs, particularly the programs designed to help developers as opposed to tenants (supply or production side as opposed to demand or rental side) as a mistake due to the ignorance of housing policymakers.⁶² The question considered here is whether there are possible rationales for this redundancy.

There are a large number of federal housing programs. HUD's budget was \$35 billion in fiscal year 2005, and programs have constantly been added or removed as the nation has attempted to provide housing for the poor.⁶³ Because housing is a durable asset, even phased-out programs have long tails. For example, the federal government has not built public housing projects since 1983, but maintaining existing units requires significant resources. "Inactive" programs still account for more than half of the federal government's budgeted housing assistance.⁶⁴ The number of programs, therefore, is large and their interaction complex.

⁶¹The discussion of the history of housing policy in this section largely derives from Charles J. Orlebeke, *The Evolution of Low-Income Housing Policy, 1949 to 1999*, 11 *Housing Policy Debate* 489 (2000). For a detailed history of federal housing policy, see, Committee on Financial Services, *A Chronology of Housing Legislation and Selected Executive Actions, 1892-2003*, 108th Cong., 2nd Sess. (2004). There are a wide variety of sources describing various housing programs on the Department of Housing and Urban Development website, www.hud.gov and www.huduser.org. Other sources summarizing the major housing programs and their effects include Richard K. Green and Stephen Malpezzi, *A Primer on U.S. Housing Markets and Housing Policy* (2003), and Report of the Bipartisan Millennial Housing Commission, *Meeting Our Nation's Housing Challenges* (2002).

⁶²See, for example, Edgar O. Olsen, *The Cost-Effectiveness of Alternative Methods of Delivering Housing Subsidies*, available at www.virginia.edu/economics/papers/olsen/costeffectivenesssurvey.pdf

⁶³Budget of the United States Government, Fiscal Year 2007, Historical Table 5.2.

⁶⁴See U.S. General Accounting Office, *Federal Housing Programs: What They Cost and What They Provide*, GAO-01-901R (2001) at p. 10. The inactive programs consist of projected-based Section 8 assistance and public housing.

The history, and the puzzle, in a nutshell is this. We saw a shift from the 1930's to the 1980's away from federally-owned housing programs to federally subsidized but privately owned housing and from there to providing rental assistance in the form of vouchers that individuals could use to purchase purely private housing. One might have concluded in the mid-1980's that the shift was irreversible. Direct rental assistance was thought to be superior on a number of grounds, primarily that it was a far cheaper method of delivering housing to the poor. In a survey and update of studies from the 1980's or earlier, one author concludes “based on the most reliable existing estimates of cost-effectiveness, we could serve all current recipients of housing subsidies as well as they are current served . . . and serve several million additional households below the poverty line by devoting all of the money current devoted to discretionary project-based assistance to tenant-based assistance.”⁶⁵ Based on this evidence, Congress, with minor exceptions, repealed direct federal subsidies for construction or rehabilitation of new units in 1983. In 1986, however, Congress enacted the LIHTC, which seems to directly contradict this trend. And in 1990, Congress added the HOME program, which is a block grant large portions of which are used as a supply-side subsidy.

There are two puzzles in this nutshell history. First, it is difficult to understand the persistence of both approaches – rental assistance and production assistance notwithstanding data indicating that rental assistance is far superior. Second, the largest production program is now run by the IRS, which has no expertise in the matter, rather than by HUD, which is filled with housing experts. Delegation to the IRS is hard to explain.

Before discussing the potential reasons for the current mix of programs, we need a brief summary of the major programs. There are three major programs or types of programs operating today: direct rental assistance, the LIHTC, and block grants to states and localities.

A. The programs

1. Vouchers

Modern housing vouchers originated in 1965 with the so-called section 23 Leased Housing program. The 1960's were still in the heyday of public housing projects. Section 23 allowed the government to lease housing from private owners and then sublease it to low income tenants at a lower rent. Normally, housing authorities found the units and arranged the leases, but some authorities allowed tenants to assist, using a “finders-keepers” method. This was the first step in separating federal housing subsidies from ownership of the housing.

The next major step (other than several small experimental voucher programs) was in 1974, when Congress enacted the Section 8 Certificate program. (Section 8 already included a production component.) During this period, rental assistance and production assistance existed side-by-side, with strong proponents of each. The Carter administration, for example,

⁶⁵Edgar O. Olsen, *The Cost-Effectiveness of Alternative Methods of Delivering Housing Subsidies*, available at www.virginia.edu/economics/papers/olsen/costeffectivenesssurvey.pdf.

saw a substantial increase in federal supply-side programs. The election of President Reagan in 1980 led to a push for vouchers. A 1982 commission appointed by President Reagan concluded that “massive production of new apartments for the poor” was not the answer to the housing shortages at that time; rather a “housing Payments Program . . . for lower-income consumers is the most efficient way to help the largest number of poor families in the quest for a decent home.”⁶⁶ In response, Congress in 1983 repealed the section 8 production program and in 1987 strengthened the voucher component by enacting the Section 8 Voucher program (which existed side-by-side with the Certificate Program). The two programs, the Certificate Program and the Voucher Program, were combined in 1998. The voucher program is cost \$15 billion in 2005.⁶⁷

2. Production Assistance

The history of federal production assistance mirrors the rise of the vouchers. Early federal housing programs, going back to the 1930's were project-based. The federal government simply built housing for the poor. The projects were owned and operated by local public housing authorities. These programs were plagued with scandal, sometimes with direct embezzlement of money but more often cost overruns, delays, and poor quality. The design and placement of large units in the 1950's was often driven by political considerations rather than housing needs.⁶⁸ The last units to be funded this way were in 1973, when Nixon imposed a moratorium on new funding.

An alternative to publicly-owned projects was privately-owned projects built with federal subsidies. The government would agree to subsidize a private developer to build housing meeting certain standards of quality, tenants, and rental levels, for a certain number of years. The initial programs of this sort started in 1954 and the parameters of the programs changed regularly over the years as policymakers attempted to design an appropriate set of rules. The Section 8 New Construction/Substantial Rehabilitation Program, enacted in 1974, was the largest of these programs. As noted, this program was terminated in 1983. The termination was in response to the large per-unit cost compared with tenant-based programs.⁶⁹

Just three years later, in 1986, however, Congress enacted the LIHTC. The reasons for the enactment of the LIHTC are very difficult to discern. It was not included in either the

⁶⁶The Report of the President's Commission on Housing (1982) at p. xxiii.

⁶⁷Budget of the United States Government, Fiscal Year 2007, p. 156.

⁶⁸For a graphic illustration, see the description of Mayor Daley's placement of the Robert Taylor Homes in American Pharaoh : Mayor Richard J. Daley - His Battle for Chicago and the Nation (2000).

⁶⁹Edgar O. Olsen, Housing Programs for Low-Income Households, NBER Working Paper 8208 (2001), at p. 6.

President's tax reform proposal, the House bill, or the bill Finance Committee Chairman Packwood presented to the President.⁷⁰ One week after Packwood presented his bill to the President with no LIHTC, the credit was included in the Finance Committee Chairman's mark. It was amended in the Senate and in conference, but was largely enacted on very short notice. It was initially a temporary program, set to expire in 1989, and then extended and made permanent in 1993. The legislative history indicates that it was intended to rationalize and replace other tax incentives for low income housing, such as accelerated depreciation, that were being repealed as part of tax reform. That is, the tax reform act was seen as unfriendly to housing, particularly rental housing, because of such reforms as the elimination of accelerated depreciation and the enactment of the passive activity loss limitations. The addition of the LIHTC was seen as an antidote. There is no reference to the elimination of the Section 8 production subsidies only three years earlier. There appears to have been no testimony by housing experts. I have been unable to find any contemporary statements by HUD about the program. Developers, facing the elimination of other tax benefits, likely played a significant role, but it is difficult to find direct evidence.

The LIHTC was initially an experimental program and little used. It was made permanent in 1993, however, and since then, the demand for the credits has grown. The credits are typically syndicated through a partnership, and the rules for syndication change when the partnership tax rules change. Nevertheless, the efficiency of the syndications has apparently increased over the years.⁷¹ The per-capita allocation of credits to the states was increased significantly between 2000 and 2002 from \$1.25 to \$1.75, and the amount was indexed for inflation. The LIHTC is expected to cost over \$4 billion in 2007.⁷²

According to several studies, the overwhelming majority of tax credit projects receive subsidies from other sources. For example, many projects receive development grants or loans at below-market interest rates from state and local governments. LIHTC projects are also eligible to rent to tenants who are themselves receiving rental assistance payment, such as vouchers.⁷³ According to one study, these additional development subsidies account for

⁷⁰Janet Stearns, *The Low-Income Housing Tax Credit: A Poor Solution to the Housing Crisis*, 6 *Yale Law & Policy Review* 203 (1988).

⁷¹Jean L. Cummings and Denise DiPasquale, *The Low-Income Housing Tax Credit: An Analysis of the First Ten Years*, 10 *Housing Policy Debate* 251 (1999).

⁷²Budget of the United States Government, *Fiscal Year 2007, Analytical Perspectives*, Table 19-3.

⁷³Edgar O. Olsen, *Housing Programs for Low-Income Households*, NBER Working Paper 8208 (2001) at p. 7.

roughly one third of the total subsidy for the projects (with the tax credit making up the other two thirds of the subsidy).⁷⁴

Although the overall story seems to be one of the rise of vouchers and the decline of production subsidies, production subsidies still dominate the low income housing landscape. As one housing expert report, “the majority of additional recipients of rental housing assistance since 1975 have received project-based assistance.”⁷⁵ Since 1990, “project-based assistance has continued to account for the majority of additions to [the] number of subsidized households in the U.S. due to the rapid growth of the IRS’s LIHTC. Furthermore, HUD spends a substantial fraction of its budget providing additional assistance to units in subsidized housing projects beyond the subsidies initially promised.”⁷⁶ The Millennial Housing Commission reports 67 percent of rental units that receive federal assistance do so through production assistance rather than rental assistance.⁷⁷ This number significantly underestimates the dominance of production assistance because it does not include the LIHTC, which is the largest active supply-side program. (Note, however, that a large portion of the production assistance is made up of the remaining stock of public housing, which roughly equal, in number of rental units, to current voucher programs.)

3. Block grants

Housing programs have always had a mix of federal and local involvement. Even in the heyday of public housing, local authorities had significant control over the location and operation of the housing. The use of block grants is a method of both shifting the actual balance of control and also shifting the rhetoric to reflect that balance.

There are two major block grant programs. The first, enacted in 1974, is the Community Development Block Grant. These funds may be used for a variety of housing-related activities, such as revitalizing neighborhoods, economic development, and providing improved community facilities and services. The CDBG cost roughly \$4 billion in 2005.

The second, enacted in 1990, is the HOME program, which is targeted to cost roughly \$2 billion in 2005.⁷⁸ These funds may be used for a variety of housing activities, including

⁷⁴Jean L. Cummings and Denise DiPasquale, *The Low-Income Housing Tax Credit: An Analysis of the First Ten Years*, 10 *Housing Policy Debate* 251 (1999), Table 7.

⁷⁵Edgar O. Olsen, *Housing Programs for Low-Income Households*, NBER Working Paper 8208 (2001) at p. 8

⁷⁶Edgar O. Olsen, *Housing Programs for Low-Income Households*, NBER Working Paper 8208 (2001) at p. 8.

⁷⁷Millennial Housing Commission (2003) Appendix 1, table 3.

⁷⁸See Budget of the United States Government, Fiscal Year 2007 – Appendix, p. 545.

homeownership downpayments, tenant-based assistance, rehabilitation, and construction of new housing.⁷⁹

Block grants can be used for a variety of purposes, neither of which are tenant-based or project-based assistance. Nevertheless, a substantial portion of block grants are used for project-based assistance.

In a sense, the decision to use block grants is orthogonal to the comparison between tenant-based and project-based assistance, relating instead to the which level of government will have control. That is, we can think of the basic housing policy decisions as having two dimensions. First, there is the question of what type of programs to have, such as supply side, demand side, or some third alternative. Second, there is the question of which agency to administer the program, one of the federal agencies, a state or local agency, or some mix.

B. Can the LIHTC be Justified?

Studies of the efficacy of housing programs almost unanimously find that rental based assistance is more effective than projected based assistance. HUD funded three major studies that estimated both the cost per unit and the mean market rent of apartments provided by vouchers and the largest older production programs, such as the Section 8 New Construction program. Two other studies of the older programs were privately funded. According to one survey, the studies were unanimous that vouchers provide equally desirable housing at a much lower total cost than the production programs.⁸⁰ The GAO recently issued a preliminary report analyzing currently active programs, including the LIHTC, with the same conclusions.⁸¹ For example, the GAO concluded that the LIHTC costs 16 percent more than vouchers to provide equivalent housing over the life cycle of the housing and 32 percent more in the first year.⁸² Vouchers are a less expensive way of providing the same quality housing. The data we have to date indicate that if the total federal housing budget were maintained but all of the money currently in active production programs were shifted to vouchers, millions more people could be provided with housing. I am unaware of *any* data to the contrary.

⁷⁹42 U.S.C. 12701-12840.

⁸⁰Edgar O Olsen, The Millennial Housing Commissioner Report: An Assessment, available at www.virginia.edu/economics/papers/olsen/MHCAssessment.pdf. Other studies agree. See, e.g., Richard K. Green and Stephen Malpezzi, A Primer on U.S. Housing Markets and Housing Policy 2003, at p. 98-101.

⁸¹General Accounting Office, Federal Housing Programs: What They Cost and What They Provide, GAO-01-901R (2001).

⁸²General Accounting Office, Federal Housing Programs: What They Cost and What They Provide, GAO-01-901R (2001).

The question is why, given the apparent superiority of rental assistance, do we see the persistence of supply-side programs. One obvious possibility is the influence of developers, who may profit from supply side programs. Another is the influence of low-income housing advocates. One might guess that they would advocate for the most efficient form of assistance but supply side programs create a degree of control for these advocates (through their influence on the bureaucracy). Moreover, demand side programs require a reliance on the invisible – one has to believe in the workings of abstract markets to support vouchers as opposed to kicking the bricks and mortar of units built with supply-side subsidies. This leap may be hard to make. A more interesting question, however, is whether there are better justifications for the continuation of both types of programs and of the LIHTC in particular.

I break the analysis down into two pieces. First, I assume there will be supply-side programs and consider whether they should be run through HUD or the IRS. Second, I consider the possible reasons for having both supply-side and demand-side as well as federal and state programs.

HUD v. IRS: One of the puzzles noted above is explaining the reasons for the enactment of the LIHTC. The legislative history is not illuminating. Given the lack of clear evidence, any explanation is necessarily speculative. Nevertheless, it might be possible to explain the choice using the principal-agent framework suggested above.

The history of bad management of projects by HUD indicates that HUD's advantage over the IRS in terms of expertise was smaller than might have been expected given the specialized nature of knowledge about housing. Moreover, the LIHTC was structured to take advantage of similar knowledge in the hands of local housing officials, who were given the responsibility of allocating the tax credits. Finally, the LIHTC was enacted at a time when the administration and HUD officials were significantly more conservative than Congress, indicating any HUD expertise would be limited by concerns about bias. All these factors point toward shifting production subsidies out of the natural agency to administer them, HUD, and to a new agency.

This story explains why HUD was not given wide discretion to administer the new program in 1986, but it does not explain why the IRS was chosen. There appears to be little advantage and some disadvantages to using tax credits as opposed to direct grants. That is, Congress could have given HUD a very narrow statute that required it to make supply-side grants on terms essentially identical to the terms of the LIHTC. Moreover, the IRS's areas of expertise are not particularly relevant: the size of the tax credit program is not sufficiently large that it would need to make use of the economies of scale in processing potentially possessed by the IRS, nor is income measurement very important. In addition, the syndication often needed to use the credits is expensive. Direct grants might not need this type of syndication. One might guess that the appropriate response by Congress to the problems illustrated above would simply be a narrow delegation to HUD.

One possibility is that syndication, while expensive, also serves an important role by providing a market check on projects. Only projects that can be sold through the syndication process can effectively use the credits. Thus, credit purchasers have to believe that the project is viable, which provides a check on the opinions of the developer and government officials. Moreover, the IRS as enforcer of the legal standards may have more credibility than HUD. The IRS might be more likely to enforce rules to the detriment of tenants (helping poor tenants is not part of their mission). Ex post, this might look like it hurts tenants, but ex ante, it might be desirable by ensuring better projects and better compliance with the rules. Thus, it seems plausible that the appropriate decision for Congress in 1986 was to locate the new supply side program in the IRS, although it is easy to imagine other, possibly better, choices.

Supply Side v. Demand Side. Supporters of supply side subsidies have offered a number of reasons for their retention, notwithstanding the studies showing the superiority of demand-side subsidies. For example, the GAO concluded that demand side programs were significantly more efficient but nevertheless, argued for the retention of supply side programs.⁸³ First, argued the GAO, supply side programs might be the only or best source of new affordable rental units, particularly units that will stay affordable over a long period of time. Second, vouchers may not help some segments of the population, such as some of the elderly or those with severe disabilities. Finally, supply side programs, because they are controlled by local authorities, form an “integral part of an overall community development strategy.” Similar arguments are made by others.

In terms of the theories for redundancy listed above, these arguments look mostly like diversification arguments. Demand side programs are acknowledged to work but there is concern about gaps in their coverage, whether it is in creating new units, serving all relevant populations, or creating units in the needed locations. Supply-side programs can work in concert with demand side programs, filling in the gaps where demand-side programs fail. Moreover, even if demand-side programs *might* work in these contexts, there is a risk of failure and diversification might help limit that risk.

The problem with this argument is that the data do not seem to support most of the contentions. For example, the GAO study itself examined seven local housing markets, some of which had very low vacancy rates (such as Boston, with a vacancy rate of 3.1%). Even in these markets, tenant-based vouchers were more cost effective than the supply-side programs. Moreover, studies of voucher programs show that recipients have a very high

⁸³General Accounting Office, Federal Housing Programs: What They Cost and What They Provide, GAO-01-901R (2001) at p. 4

success rate in finding rental units.⁸⁴ There is no reason to believe that supply-side programs are needed to increase the supply of housing.

It is more difficult to assess whether giving local officials additional controls through supply-side subsidies to help revitalize neighborhoods is a good idea. It is hard to complain about eliminating slums. Concentration of the poor in the old public housing projects has long been regarded as undesirable, except possibly by the machine politicians who were thereby able to control voting by the unfortunate tenants. Perhaps new projects in run-down areas create positive externalities that need public action to be realized. On the other hand, improving neighborhoods tends to help owners rather than renters, and most of the poor tend to be renters. (This is the standard complaint with gentrification.) Moreover, localities might best be able to direct development through the provision of services, the lack of which is often one of the reasons for the lack of private projects in many areas. Inefficient supply-side subsidies might not be needed to achieve the goal of local government involvement in choosing areas for rebuilding.

Finally, with respect to certain very difficult to reach segments of the population, such as the severely disabled or frail elderly, serving these populations through supply-side programs is not a justification for retaining any of the larger programs, such as the LIHTC. The LIHTC in particular tends to serve a population with slightly higher income than other housing programs, and, therefore is particularly ill-suited in this regard.⁸⁵

At least on initial examination, these rationales, which might be grouped together under the umbrella of diversification of housing programs, all seem weak. Although this is a brief survey of a complex topic and I am reluctant to draw firm conclusions, there appears to be few good reasons for the existing redundancy. That is, none of the theories of redundancy examined above support the retention of the LIHTC and it should most likely be eliminated in favor of increasing tenant-based housing vouchers.

VII. Conclusions

There are three main conclusions. First, adding principal agent considerations can change the expertise/coordination story if principal agent concerns prevent Congress from making full use of an agency's expertise. Second, redundancy might be likely as a diversification strategy. Tax expenditures might offer some unique advantages in this regard because their risk of failure might be independent of the risk of failure by other agencies. Third, it is difficult to explain redundant tax expenditures through adverse selection or moral hazard stories.

⁸⁴Stephen D. Kennedy and Meryl Finkel, Section 8 Rental Voucher and Rental Certificate Utilization Study: Final Report, U.S. Department of Housing and Urban Development (1994).

⁸⁵See Millennial Housing Commission Report (2002).

Examination of the LIHTC and the redundancy in housing programs cast doubt on whether, at least in that case, a redundant tax expenditure is desirable. It would appear that eliminating redundancy and eliminating the use of the tax system would allow many more households to receive housing assistance.

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