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The Integration of Tax Spending Programs

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Abstract

This paper provides a theory for deciding when a spending program should be implemented through the tax system. The decision is traditionally thought to be based on considerations of tax policy. The most common theories are the comprehensive tax base theory and the tax expenditures theory, both of which rely on tax policy to make the determination. We argue instead that the decision should be based solely on consideration of organizational design. Activities should be grouped together in a way that achieves the best performance, much like a corporation decides how to divide its business into divisions. Tax policy is entirely irrelevant to the decision. This paper begins the process of applying organizational design theory to the tax and spending problem, considering theories of hierarchies based on the needs for specialization in and coordination of activities. The paper then analyzes whether food stamps and the earned income credit should be implemented in through the tax system based on this analysis.

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The Integration of Tax and Spending Programs

David A. Weisbach and Jacob Nussim[*]

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This paper provides a new theory of tax expenditures.[1] The argument is that the decision to implement a "non-tax" program through the "tax" system has little or nothing to do with tax policy.[2] Instead, the tax expenditure decision, which we will also call the integration decision or the decision to combine tax and spending programs, is solely a matter of institutional design. It is about assigning projects such as tax collection, education, defense, or housing to units of government. Different groupings of activities will perform differently, and we should use groupings that give the best possible performance. The problem is similar to the problem of splitting up a corporation into divisions.

Suppose, for example, we are considering whether an education subsidy should be implemented through the tax system or through a direct expenditure. The government might, for example, might use a tax exclusion, deduction, or credit, implemented by the Internal Revenue Service, or alternatively, it might use a direct grant, implemented by the Department of Education.[3]

The two leading theories that purport to address this question focus on tax policy. The most widely accepted theory, the comprehensive tax base theory, argues that a broad tax base distorts economic decision-making less than a narrow base and is also much simpler.[4] Correspondingly, if the tax base is to be broad, spending or regulatory programs should not be implemented through the tax system and instead should be delegated to other agencies or departments. Integrating a spending program into the tax system, such as through a

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[1]The term "tax expenditures" is subject to much dispute. Section II below discusses the term in some detail. The discussion in this paper does not depend on any particular definition of tax expenditures. Instead, it is about the question of dividing government activities into units or agencies of the government. The discussion arguably applies to any potential segmentation of the government. To the extent we use the term "tax expenditures "in the text, it is sufficient to define tax expenditures as a spending program implemented through the tax system with the understanding that at the borders those terms are not well defined.

[2]We uses parentheticals because there is no exogenous definition of the tax system. Instead, the tax system is whatever activities end up being optimal to group together that have a tax-like function. We use the term "tax system" as a relatively compact way of referring to the traditional tax collection function.

[3]For example, there are education subsidies built into the tax system; see infra note __. There are also numerous direct education subsidies ranging from items as ubiquitous as public schools to specific grants such as Pell grants; see infra note __. Many of the tax and direct spending alternatives are close substitutes for one another.

[4]The comprehensive tax base literature is vast. Major works include Boris I. Bittker, A "Comprehensive Tax Base" As A Goal of Income Tax Reform, 80 Harvard Law Review 925 (1967); Richard A. Musgrave, In Defense of an Income Concept, 81 Harvard Law Review 44 (1968); Joseph A. Pechman, Comprehensive Income Taxation: A Comment, 81 Harvard Law Review 63 (1968). See infra notes __ for further citations.

deduction, exclusion, or credit for some special activity, narrows the tax base and makes the tax system more complex. The standard or default answer in tax policy, therefore, is that the education subsidy should not be implemented through the tax system.

The other leading theory, the theory of tax expenditures, focuses partially on institutional design but is ultimately a theory of taxation.[5] The key insight of this theory is to recognize the functional equivalence of putting the program in the tax system or somewhere else. This insight is about institutional design. The theory, however, ultimately falls back on tax policy for recommendations. For example, the distributional effects of a policy are said to depend on whether it is correctly considered part of the tax base. The tax expenditures theory just like the comprehensive tax base theory would conclude that the education subsidy should not be implemented through the tax system.

In contrast to these theories, which focus on taxation, our claim is that all society should care about are the effects of overall government policy. It is entirely irrelevant whether some piece of government policy complies with independent tax norms.[6] Holding the underlying policy constant, there are no effects to putting a program into or taking a program out of the tax system even if doing so hurts or enhances traditional notions of tax policy. Welfare is the same regardless of whether the program is formally part of the tax system or placed somewhere else in the government. If we mistakenly look only at the tax system instead of overall government policy, we will draw the wrong conclusions. Putting the program into the tax system will make the tax system look more complicated, but there is unseen simplification elsewhere. The tax system will seem less efficient but the efficiency of government policy is unchanged.

The institutional design question is about dividing the government up into units that will together provide the best possible set of public policies and government services. Different groupings of government services will perform differently. Consider a proposal to have the Internal Revenue Service run the country's defense system, replacing the Department of Defense. The proposal is not as silly as it sounds. It would not mean that bespectacled revenue agents would be parachuting into the Hindu Kush wearing night goggles, camouflage, and pocket protectors. Instead, an intelligent Commissioner of Internal Revenue would allow his employees to specialize. Revenue agents would specialize in

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[5]Major works arguing for the tax expenditure approach include Stanley S. Surrey, Pathways to Tax Reform: The Concept of Tax Expenditures, (Cambridge 1973), and Stanley S. Surrey and Paul R. McDaniel, Tax Expenditures (Cambridge 1985).

[6]Analysis similar to the approach taken here has begun to find its way into the economic literature. See Eric Toder, Tax Cuts or Spending – Does it Make a Difference?, 53 National Tax Journal 361 (2000).

There is some foreshadowing of our themes in the legal literature. Seem e.g., Douglas A. Kahn and Jeffrey S. Lehman, Tax Expenditure Budget: A Critical Review, 54 Tax Notes 1661 (1992).

reading financial statements and soldiers would specialize in fighting. Policies under such a proposal might very well continue much as they are today. The reason why the proposal is not a good idea is that there are no benefits to coordinating these two functions, tax administration and defense. Moreover, there would be costs because at at the very top level, where functions must be combined, administrators would be unable to specialize in these relatively distinct functions.

Consider instead a proposal to implement all federal welfare-type programs through the Internal Revenue Service. Proposals of this sort have been made frequently, often under the rubric of a negative income tax.[7] This may make sense (although see section IV for a more detailed discussion). The reason why is that there may be benefits from putting welfare and tax into the same organizational unit. Both rely on income or wealth measurement, both need large scale information and financial processing, and the substantive policies themselves, such as a policy of redistribution, have significant overlap and would benefit from coordination.

The key variables from this perspective are not about tax policy. Instead, they are about the benefits of coordination between and specialization within various types of activities performed by the government. The Department of Defense needs highly specialized operatives and needs little coordination with the revenue collection function. Welfare programs may benefit from substantial coordination with taxes and there may be low costs to losing the benefits of separate units that can specialize in each function. The question is the trade-offs between the benefits of specialization and coordination.

This intuition strongly contrasts with the usual tax arguments. For example, the Flat Tax is an attempt to provide a comprehensive consumption tax base. All the extraneous, non-tax elements of current tax law would be removed.[8] The Flat Tax is said to be very simple, and it may be if one looks only at the tax system. But limiting the tax system to this one measurement will force other government programs to take up the slack – programs of all sorts that are now embedded in the tax system will have to be implemented by other government agencies. Viewing the Flat Tax (or any comprehensive tax base) as simple requires ignoring the rest of government, relegating the complexity and mess of government spending and regulation to somebody else's backyard. There is no reason to believe,

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[7]Milton Friedman, Capitalism and Freedom 191-93 (1962); James Tobin, On Improving the Status of the Negro, 94 Daedalus 878 (1965); Milton and Rose Friedman, Free to Choose, Ch. 4 (1980); Christopher Green, Negative Taxes and the Poverty Problem 160-76 (1967); Michael R. Asimow & William A. Klein, The Negative Income tax: Accounting Problems and a Proposed Solution, 8 Harvard Journal on Legislation 1 (1970); William A. Klein, The Definition of "Income" Under a Negative Income tax, 2 Fla. St. U. L. Rev. 449 (1974); William D. Popkin, Administration of a Negative Income Tax, 78 Yale Lal Journal 388 (1969); James Tobin, Joseph Pechman & Peter M. Mieszkowski, Is a Negative Income Tax Practical?, 77 Yale Law Journal 1 (1967).

[8]See Robert Hall and Alvin Rabushka, The Flat Tax (2d ed. 1995).

however, that the tax collection function should be separated from other functions of government (and maybe good reasons to believe that it should not be). The same is true for virtually all proposed fundamental tax reforms.

This paper expands on these intuitions. Section I lays out the question. The framing of the question as one of institutional design as opposed to one of tax policy is in many ways more important than the answer, and Section I sets forth this framing. Section II discusses the comprehensive tax base and tax expenditures literatures. We will argue that neither provide a convincing answer to the integration question. The comprehensive tax base argument is far more prevalent but ignores the basic problem. It takes a completely tax-centric view of government and, therefore, can lead to faulty conclusions. The tax expenditures literature to some extent addresses the problem as an institutional design question, but the analysis is not convincing.

Section III approaches the problem from an institutional design standpoint. The study of organizations is old and deep, extending into sociology, economics, and political science, and even to anthropology and psychology. Covering even a small portion of this literature is well beyond the scope of one paper. To get a handle on the literature, the problem can be divided into three pieces. First, we can view organizations as devices to coordinate specialized production, in which production processes are divided into tasks or divisions. Second, we can view the design of organizations as a method of solving agency problems. Third, we can view the design of public organizations as methods of resolving public choice problems. The volume of literature in each of these areas is very large (and the more informal literature generally mixes these areas together), but the portions that relate directly to the problem of divisions is reasonably manageable and in some cases quite sparse. In this paper we address only the specialized production part of the puzzle. We intend to address the agency and public choice elements in subsequent work.

The key intuition on specialization of production is that there are benefits to both specialization in particular activities and to coordination between activities. Putting a set of activities into a governmental agency promotes specialization within that set of activities and coordination among the activities. However, it makes it more difficult to coordinate between the activities in that agency and the activities of other agencies.

Section III develops this intuition, surveying the literature in the area. The intuitions are quite general and vague and there are few clear results. Nevertheless, the integration question will not wait for formal models or clear answers. We are left making recommendations based on the informal and loose intuitions. In addition, it is our suspicions that the problem is sufficiently complex we may not be able to do much better. The best we can do might be to muddle through.

To help develop the intuitions, Section, IV works through several examples. In particular, Section IV examines the question of whether either the food stamps program or the earned income credit should be implemented as part of the tax system. There are good reasons to think so – these programs are transfer programs based on income and the IRS may be the agency that is best able to perform this function. Nevertheless, we conclude that food stamps should not be part of the tax system because the tax system cannot respond in a sufficiently timely fashion to the needs served by the food stamp program. The EIC, by contrast, works reasonably well in the tax system. The difference in the two programs is their degree of complementarity with functions performed by the tax system. Section V offers a conclusion.

I. The Question

The question we ask is what is the best way to implement a government program given that the program is going to be implemented. As Stanley Surrey noted in his tax expenditures analysis, virtually any program can be implemented in at least two ways.[9] It can be implemented through a direct spending[10] or through a tax program. The question is how to make this choice.

For example, suppose the government wants to provide an education incentive. The incentive might, for example, provide money for students to use in choosing high schools, comparable to a voucher program. Or the incentive might try to reduce the cost of borrowing money to pay for college, similar to the recently enacted college savings plans and income contingent student loans.[11] In either case, the grant might be based on attendance at an

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[9]See Surrey, Pathways (cited in note __), and Surrey and McDaniel, Tax Expenditures (cited in note __)..

[10]The term "direct spending" is a budgetary term of art referring (in the Budget Enforcement Act of 1990) to mandatory spending. We do not use it in its technical sense. Instead, we use it in a colloquial sense to mean a program implemented through a government agency incurring outlays rather than implemented by means of an offset to tax revenue.

[11]A Qualified Tuition Program (QTP; also known as section 529 plan), for instance, is a program set up to allow you to either prepay, or contribute to an account established for paying a student's qualified higher education expenses at an eligible educational institution. A QTP can be established by the state or by eligible educational institutions. A distribution from a QTP can be excluded from income if the amount distributed is used to pay qualified higher education expenses (earnings of educational institutions' QTPs will be exempt only starting in 2004). See I.R.C. Section 529. The DOE offers Direct Stafford loans which offer several repayment plans. One such plan - the income contingent repayment plan - bases the monthly repayment on annual income, family size, interest rate, and loan amount. As income rises or falls, so do the payments. See 20 U.S.C. section 1087e(e).

appropriate institution, income, citizenship, race, lack of criminal convictions, grades, or a variety of other attributes.[12]

The program can be implemented through an expenditure program that hands out money to individuals meeting the criteria. The department implementing the program, say the Department of Education, would have to create an application process, a certification or audit process (both for students and schools), a process for handing out money, and, if appropriate, a process for collecting payments.[13] Setting up such a program would be complex and take significant resources. Alternatively, a similar program would be implemented through the tax system by allowing individuals to subtract or add the same amounts to their taxes (or if their taxes are not sufficient, requiring the Treasury Department to write a check to the individual based on a claim made on their tax form).[14] Similar application, certification, and auditing

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[12]For example, the nonrefundable Hope Scholarship Credit can be claimed against federal income taxes for the qualified tuition and related expenses of each student in the taxpayer's family (i.e. taxpayer, his spouse, an eligible dependent). The student has to be enrolled at least half-time in one of the first two years of postsecondary education in a program leading to a degree, certificate, or other recognized educational credential. An eligible student must also be free of any conviction for a Federal or State felony offense consisting of the possession or distribution of a controlled substance. The college, university, vocational school, or other postsecondary educational institution where the student is enrolled must be an institution that is described in section 481 of the Higher Education Act of 1965 (20 U.S.C. section 1088) and, therefore, eligible to participate in the student aid programs administered by the Department of Education. The credit amount is phased out with income. Additionally, in general, the credit is not available to nonresident aliens. IRC section 25A.

The Federal Pell grant is awarded on the basis of need which consist of the costs of attending school and family expected contribution to education expenses. The latter is a measure of family income. An eligible student must have a high school diploma, (or a General Education Development (GED) Certificate), be enrolled or accepted for enrollment as a regular student working toward a degree or certificate in an eligible program, and must maintain satisfactory academic progress (meeting the school's written standard of satisfactory progress). Additionally, eligible males have to register with the Selective Service. See U.S.C. section 1070a.

[13]For education programs offered by the Department of Education see http://studentaid.ed.gov/PORTALSWebApp/students/english/index.jsp. A few examples are the Federal Pell Grant (U.S.C. section 1070a); Federal Direct Stafford loans (20 U.S.C. section 1078); Federal Direct Plus loans (20 U.S.C. section 1078-2). See also The College Board, Trend in Students Aid (http://www.collegeboard.com/press/cost01/html/TrendsSA01.pdf).

[14]More than a few tax education subsidies exist. The Hope Scholarship Credit, see supra note __; the nonrefundable Lifetime Learning credit for postsecondary education (I.R.C section 25A); Student loan interest deduction for qualified higher education expenses (I.R.C. section 221); Tuition and fees deduction for higher education (I.R.C. section 222); Coverdell Education Savings Account (formerly Education IRA) provides for tax free withdrawals from saving accounts designated for elementary, secondary, and postsecondary school expenses (I.R.C. section 530); QTP, see supra note __; early withdrawals from IRAs made for qualified education expenses are exempt from the 10% additional tax on early withdrawals (I.R.C. section 72(t)(2)(E)); Education Savings Bond Program exempts some or all of the interest earned on qualified U.S. saving bonds used for qualified higher education expenses (I.R.C. section 144); Employer-Provided Educational Assistance enables an employer to provide tax free education benefits; exemption of scholarships and fellowships such as the Pell grant and Fulbright (I.R.C. section 117). See also a description of tax education subsidies in Albert J. Davis, Choice Complexity in Tax Benefits

requirements could be imposed. The additional requirements imposed on the tax system would be significant, making the tax system much more complex. The program could also be split between the tax system and another agency, with each agency providing services related to its expertise and some coordination between the operations.[15]

Similarly, suppose the government wants to provide welfare for a subset of the poor. For example, the government may want to provide welfare to those poor who work a certain amount. Such a welfare program can be implemented through the tax system. The Earned Income Credit (EIC) does exactly this.[16] It provides a tax credit for individuals if their labor earnings are within a certain range, subject to a variety of other criteria (for example, different credits are granted to the married, the unmarried, those with and without children, and those with non-labor earnings). A similar program can be implemented outside the tax system through a direct grant of aid, based on similar criteria.[17]

The question is how we should decide which is the better method of implementing these programs in each of the circumstances. They key is that we will assume a program of some sort will be implemented, so that it is not an option to say that these are bad ideas and we should do nothing. They may very well be bad ideas, and actual programs implemented by the government may be even worse, but unless one is going to admit no role for the government other than the most minimal functions, these sorts of programs and problems will arise. The government will, sometimes for the better and sometimes for the worse, subsidize, penalize, or regulate various activities, and we must decide how it should be done.[18]

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for Higher Education, 55 National Tax Journal 509 (2002).

[15]This is not uncommon. The Hope Scholarship Credit, for example, is available only to individuals attending schools certified by the Department of Education. See IRC section 25A(f)(2). On the other side, a few student financial assistance programs managed by the Department of Education (e.g. Pell grant, subsidized Federal Stafford loans, Federal Perkins loans, Federal Supplemental Education Opportunity Grants) use tax filing status to simplify their need criteria. For example, if an independent student or dependent student's parents are not required to file tax returns or are eligible for 1040A or 1040EZ forms, then a simplified formula is applied (20 U.S.C. section 1087ss); the income contingent repayment plan (see supra note __) uses Adjusted Gross Income information communicated from the IRS to the DOE (20 U.S.C. section 1087e(e)).

[16] I.R.C section 32. For a description and discussion of the EIC see Joseph V. Hotz and John K. Scholz, The Earned Income Tax Credit, in Robert Moffitt ed., Means-Tested Transfer Programs in the U.S. (forthcoming).

[17]Major direct spending programs designed mainly around financial and household structure status are TANF (formerly, AFDC) (42 U.S.C. section 601), Section 8 voucher program (42 U.S.C. section 1437f), Child Care and Development Fund (42 U.S.C. section 9858).

[18]Many tax expenditures are bad policy and those arguing against expenditures of this sort are likely assuming that eliminating them from the tax system means eliminating them altogether. (For instance, Surrey traced back the origin of a few major exemptions and deductions in the tax code, and showed that they have arisen almost fortuitously. Stanley S. Surrey, The Federal Income Tax Base for Individuals, 58 Columbia Law Review 815 (1958).) This may often be true, but the arguments should then be framed as arguments against the underlying policy

There are four important limitations to our framing of the question. First, we will generally discuss only comparisons between direct grants and tax subsidies. A similar analysis can be applied to regulatory programs. Regulatory programs can be implemented through the tax system or through direct regulation. For example, we could directly regulate executive salaries or we could, as we actually do, impose tax penalties for executive salaries that do not conform to some set of requirements.[19] In addition, tax and expenditure programs might often be implemented through regulations. For example, the minimum wage can be viewed as a combination of a tax and a spending program, taxing employers and providing grants to employees, implemented through regulations.[20] We are not even sure there is a clear dividing line between spending, regulation, and taxing, so we do not intend to limit the analysis in any way. Nevertheless, our examples will tend to focus on the comparison between direct grants and taxes, and there may be differences in regulatory programs that we gloss over.[21]

Second, there is a bureaucratic and a legislative component to the implementation of any program that typically (but not always) move in parallel. Putting a program into the tax system generally (but not always) involves delegating the program to the Internal Revenue Service and also at least partially delegating legislative jurisdiction to the tax writing committees. Putting the program into another agency generally involves delegating legislative jurisdiction to the appropriate oversight committee for that agency.

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rather than as arguments against tax system implementation of the policy.

[19]See IRC 162(m).

[20]See Dan Shaviro, The Minimum Wage, the Earned Income Tax Credit, and the Optimal Subsidy Policy, 64 University of Chicago Law Review 405 (1997). For a similar discussion in the context of excise taxes see Pathways, at 155-174 (cited in note __), and Stanley S. Surrey, and Paul R. McDaniel, The Tax Expenditure Concept: Current Developments and Emerging Issues, 20 Boston College Law Review 225, 246-252 (1979).

[21]There is extensive writing on the choice between taxes and regulation. The debate between Coase and Pigou can be seen as a debate over the merits of taxation and regulatory regimes (property rights in this case). See Ronald H. Coase, The Problem of Social Cost, 3 Journal of Law and Economics 1 (1960). The discussion by Summers of the choice between mandated benefits and taxation also reflects this choice. See Lawrence H. Summers, Some Simple Economics of Mandated Benefits, 79 American Economic Review 177 (1989). Similarly, the exchange between Weitzman and Kaplow/Shavell over the merits of environmental taxes can be seen in this light. See Martin L. Weitzman, Prices vs. Quantities, 41 Review of Economic Studies 477 (1974); William J. Baumol and Wallace E. Oates, The Theory of Environmental Policy (New York: Cambridge University Press 1988); Louis Kaplow and Steven Shavell, On the Superiority of Corrective Taxes to Quantity Regulation, 4 American Law and Economics Review 1 (2002). Many of these writings illustrate that there may be differences between taxes and regulation that appear to be unrelated to the organizational structure of government and instead, usually are related to how government policy harnesses the information available to individual actors and to the government. We suspect that the differences in taxes and regulation found in the literature relate to underlying policies and not whether they are called taxes or which agency implements them. But see Paul Milgrom and John Roberts, Economics, Organization, and Management, ch. 4 (Prentice-Hall, N.J. 1992).

The interaction between the committee structure, the legislative floor, the agency, and the President, can be very complex. For example, problems of legislative organization raise unique problems because legislatures cannot choose their members and have a low tolerance for hierarchies.[22] The internal design of a legislature might, therefore, differ from the stand-alone optimal design of a bureaucracy. The interaction of legislative design with oversight requirements may affect bureaucratic design.[23]

To simplify the problem, our focus will generally be on agencies rather than legislatures. Principal/agent problems between the legislature and agencies, between the executive and agencies, and within the legislature are likely to be a central piece of the integration issue but in this paper we focus only on the organization of specialized production theories, ignoring these principal/agent problems for now.

The third simplification is that we will ignore for now agency capture, interest group activity, or other problems of public choice. Agency capture is in a sense just a variant on the principal/agent problem, where the agent's preferences coincide with the preferences of the regulated industry and do not align with the preferences of the principals. The difference is that the principal/agent problem arises because of problems of collective action (such as monitoring of the agency by large groups of individuals). The possibility of agency capture has important consequences for the design of agencies. For example, scholars have considered the use of tax expenditures as a way to limit capture of congressional committees.[24] While agency capture is likely to be important in considering whether to put programs in the tax system, we put the issue to one side for now.

Fourth, we generally consider the tax expenditure decision from the framework of existing institutions. We assume, for example, in considering education subsidies, that both the tax system and the education system exist and the question is how to allocate a given program. The framework should apply more generally to wholesale reorganizations of the government but in our examples and to some extent in our thinking, we have confined ourselves to smaller changes.

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[22] The work on congressional oversight of bureaucrats is vast. For a typical sample of models of this problem, see Kenneth A. Shepsle and Barry R. Weingast, eds., Positive Theories of Congressional Institutions (Ann Arbor 1995); Keith Krehbiel, Information and Legislative Organization, (Ann Arbor 1991); David Epstein and Sharyn O'Halloran, Delegating Powers: A Transactional Politics Approach to Policy Making under Separate Powers, (Cambridge University Press 1999).

[23] Id.

[24] Edward A. Zelinsky, James Madison and Public Choice at Gucci Gulch: A Procedural Defense of Tax Expenditures and Tax Institutions, 102 Yale Law Journal 1165 (1993), and in a formal framework Dharmapala Dhammika, Comparing Tax Expenditures and Direct Subsidies: The Role of Legislative Committee Structure, 72 Journal of Public Economics 421 (1999).

To summarize the framework, we pose the question as a choice of implementation methods for a program that is going to be adopted. The choice is one of picking which government agency or agencies should implement the program, with the primary focus on whether it should be the tax system or some other agency. We will focus on the organization of production within the bureaucracy and the effects of coordination and specialization, leaving aside for now questions about the legislature and about principal/agent, or agency capture problems.

II. Do the Comprehensive Tax Base and Tax Expenditures Literatures Answer the Question?

A. *The Comprehensive Tax Base*

The goal of the comprehensive tax base (CTB) advocates is to provide a broad tax base that has few or no exceptions, preferences, or loopholes.[25] CTB's generally come in two flavors: income CTB's and consumption CTB's.[26] An income CTB attempts to tax some comprehensive measure of income, the details of which depend on each advocate's taste for purity over administrative complexity (or any other important enough consideration). A consumption CTB similarly attempts to tax a comprehensive measure of consumption.[27]

The argument for a CTB of either the income or consumption type is based on both efficiency and fairness. The efficiency argument is that a broad tax base is more neutral

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Stanley S. Surrey, The Federal Income Tax Base for Individuals, 58 Columbia Law Review 815 (1958) (cited in note __); Walter J. Blum, Tax Policy and Preferential Provisions in the Income Tax Base, in House Committee on Ways and Means, 86th Congress. 1st session, Tax Revision Compendium: A Compendiums of Papers on Broadening the Tax Base, Vol.1, 77 (Washington 1959); Joseph Sneed, Major Objectives of and Guides for Income Tax Reform, in House Committee on Ways and Means, 86th Congress. 1st session, Tax Revision Compendium: A Compendiums of Papers on Broadening the Tax Base, Vol.1, 61 (Washington 1959); Report of the Royal Commission on Taxation Vol. 1 (Canada 1966); Bittker, A "Comprehensive Tax Base" As A Goal of Income Tax Reform, 80 Harvard Law Review 925 (1967) (cited in note __); Richard A. Musgrave, In Defense of an Income Concept, 81 Harvard Law Review 44 (1968) (cited in note __); Joseph A. Pechman, Comprehensive Income Taxation: A Comment, 81 Harvard Law Review 63 (1968) (cited in note __); Charles O. Galvin, More on Boris Bitkker and The Comprehensive Tax Base: The Practicalities of Tax Reform and the ABA's CSTR, 81 Harvard Law Review 1016 (1968); Boris I. Bitkker, Comprehensive Income Taxation: A Response, 81 Harvard Law Review 1032 (1968).; Henry Aaron, What is Comprehensive Tax Base Anyway? 22 National Tax Journal 543 (1969); J. Pechman ed. Comprehensive Income Tax (The Brooking Institution 1977); Joseph A. Pechman, Tax Reform, The Rich and The Poor, Ch. 4 (The Brooking Institution, 2nd Ed., 1989); J. Gregory Ballentine, Broadening Our Approach to Income Tax Reform, 5 American Journal of Tax Policy 1 (1986); Boris I. Bittker, Charles O. Galvin, Richard A. Musgrave, and Joseph A. Pechman, A Comprehensive Income Tax Base? A Debate (Federal Tax Press 1968).

26 See, for example, David F. Bradford and the U.S. Treasury Tax Policy Staff Tax Analysts, Blueprints for Basic Tax Reform (Virginia, 2nd ed.,1984).

27 See, for example, Bradford (1984), Id.; Hall and Rabushka, The Flat Tax, (cited in note __).

between activities than is a narrower base. For example, the current income tax does not tax owner-occupied homes but does tax corporate capital. These differential tax rates change where individuals allocate capital and, therefore, distort markets. A CTB would be neutral between investments in owner-occupied homes and corporations and, therefore lead to a more efficient allocation of capital. Moreover, with fewer leakages, tax rates would be lower, which would mean inefficiencies are further reduced. The fairness argument is similar – individuals would be taxed the same regardless of their preferences for engaging in different sorts of activities.

The CTB agenda, if followed, almost surely would lead to substantial improvement in government policy. Many, if not most, of the exemptions to the tax base are unwarranted, and broadening the tax base will often lead to a more efficient, more fair, and simpler set of policies. We have no quarrel with much of the agenda and applaud much of the work.

The CTB literature, however, has nothing to say about the question posed here. If we are going to have a program and the only choice is how it is going to be implemented, the efficiency and fairness arguments in the CTB literature completely fail. If we hold the content of the policy fixed, the efficiency implications are the same regardless of whether the tax agency or some other agency implements it. Similarly, the fairness of the policy is the same regardless of whether the tax agency or another agency implements it. If one considers a program that is going to be implemented one way or another, the conclusions of the CTB literature may be completely wrong. There is no a priori reason to believe that a broader tax base is better in this situation.

One possibility is the CTB advocates believe that government should never subsidize, penalize, or regulate activities. Then, broadening the tax base does not merely cause similar programs to be implemented elsewhere. Broadening the tax base eliminates the program. In many cases this may be desirable and a good description of the effect of broadening the tax base. For example, many of the base broadening provisions of the 1986 tax reform did not result in substitute of programs in other agencies. But this is unlikely to either be desirable or a good prediction about government policy in all cases. If we are going to have a program, the CTB literature simply has nothing to say about where it should be.

As far as we can tell, the only way one can make the arguments made by CTB advocates is to treat the tax system as separate from the rest of the government. Under this view, ensuring the efficiency and fairness of the tax system, taken alone, should be the goal of tax reformers. This produces the odd result that removing a program from the tax system and replacing with an identical program implemented by another agency produces an efficiency and fairness gain, notwithstanding that no behavior is changed and no policy has been changed. Kyle Logue has called this "tax exceptionalism."[28] Another name might be NIMBY, or not in my backyard. CTB advocates want their backyard to be clean but don't seem to care about where the trash is put.

Some CTB advocates make a political (as opposed to an efficiency or fairness) argument against integrating spending programs into the tax system. The idea is that one tax loophole leads to another. As described by Walter Blum:[29]

> There is nothing about the combination of rate reduction and base broadening which dictates that all preferential provision be eliminated, but there are potent reasons for leaning over backwards before allowing any of them to remain . . . . [The] existence of any one special dispensation makes it easier to argue on behalf of others. . . .[A] Spartan attitude toward defending the integrity of the base will aid in creating the impression that the reform plan is intended to improve the system as a whole, with the chips falling as they may, and is not calculated to benefit certain identifiable groups possessing political strength.

This argument, however, is unpersuasive. Shifting programs from the tax system to other parts of the government does not change the amount of largesse by the government. If handing out goodies to one group makes it difficult to say no to another group, putting a program in another agency should make it harder to say no to other groups in exactly the same way. Blum's argument is like the Alcoholics Anonymous argument – if we take one drink of special tax preferences we will not be able to stop, so we should never take the first drink. But the argument ignores the fact that other parts of the government are face down in the gutter drunk.

One possible reason that it may be more difficult to limit largesse in the tax system is the claim that tax programs are less visible than direct spending.[30] This argument is, at least on the right track in the sense that it compares different ways of implementing a program.

[28] Kyle D. Logue, If Taxpayers Can't Be Fooled, Maybe Congress Can: A Public Choice Perspective on the Tax Transition Debate, 67 University of Chicago Law Review 1507, 1524 (2000).

[29] Walter Blum, Federal Income Tax Reform – Twenty Questions, 41 Taxes 672, 679 (1963). See also William L. Cary, Pressure Groups and the Revenue Code: A Requiem in Honor of the Departing Uniformity of the Tax Laws, 68 Harvard Law Review 745 (1955), Joseph A. Pechman, Erosion of the Individual Income Tax, 10 National Tax Journal 1, 2 (1957), and Sneed, in Tax Revision Compendium (cited in note __).

[30] Blum, in Tax Revision Compendium at 83 (cited in note __); Bittker, Accounting for Tax Subsidies, National Tax Journal at 244-5 (1969) (cited in note __). Even in the presence of tax expenditures budget the visibility argument is still alive; see Tax Expenditures, at 104-5.

The visibility argument, however, is not convincing. Between the tax expenditures budget[31] and the wide variety of articles and books discussing tax breaks,[32] there is no reason to believe that individuals are not as well informed about tax breaks as direct subsidies.[33] In many cases, it is hard to believe that tax expenditures are less visible than other government programs. For example, it is hard to believe that the home mortgage interest deduction[34] is less visible than, say, the implicit guarantee the government provides to Fannie Mae and Freddie Mac to lower mortgage costs. It is hard to believe that tax deductions for brownfields[35] clean-up are less visible than any implicit subsidies one might find in the Superfund rules.

Perhaps framing effects make expenditures through the tax system less visible than direct expenditures. People may perceive a reduction in taxes for engaging in a specified activity differently than an identical direct grant. The reason is that people may perceive a tax subsidy as merely letting them keep their money rather than as a subsidy even though they perceive an identical program that taxes them and give the money back as a subsidy.[36] Attempts to publicize the extent of tax subsidies through budgets or books will not be able to overcome this flaw in our reasoning ability.

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[31]The tax expenditures budget is a list of "non-tax" provisions included in the tax law and an estimate of their cost. See the discussion in the text and note ___, below.

[32]E.g., Jeffrey H. Birnbaum and Alan S. Murray, Showdown at Gucci Gulch: Lawmakers, lobbyists, and the Unlikely Triumph of Tax Reform (New York 1987).

[33]Louis Eisenstein contends:

> "Concededly, a good deal of tax law is exceedingly technical and abstruse. But no one claim that voters can be magically transformed into tax experts in several easy lessons. The question rather is whether they would grasp the basic essentials of tax policy if the issues were adequately presented to them. The real difficulty, I suspect, is that they might understand too well. If this second reason is tenable, then most Americans should not be concerned with the social problems of atomic energy, because nuclear physics is beyond their comprehension. In any event, where taxes are involved, our Congressmen and others of authority are noticeably reluctant to speak informatively for general consumption. The discourse, as a rule, is on a high level of platitude. If the public is unenlightened, the fault is not theirs."

Louis Eisenstein, The Ideologies of Taxation, 227-8 (1961). Zelinsky also suggests that tax legislative process may be more visible than the non-tax; See Zelinsky (1993) (cited in note __).

[34]Section 163 of the Internal Revenue Code authorizes a deduction for "qualified residence interest." See I.R.C. section 163(h)(3).

[35]I.R.C. section 198.

[36]See Daniel Shaviro, When Rules Change: An Economic and Political Analysis of Transition Relief and Retroactivity at __ (2000).

We are not sure the extent to which this is true. There does not seem to be a framing effect problem with those who study or work with the tax system – lobbyists and their clients fully understand the benefits of tax credits or deductions.[37] If there is a framing effect, it can be overcome. The argument is really that the hoi polloi are too stupid to understand the equivalence between a tax benefit and direct spending. But if the argument relies on stupidity, it is hard to see how the same individuals will understand or even know about the vast number of direct spending programs, many of which have very subtle and indirect effects.

For example, it is hard to believe that it is the case that individuals better understand the subsidies for driving created by federal highway spending any better than they understand subsidies for driving through tax benefits for oil. Both are very complex programs that only indirectly affect the consumer. Neither shows up in a form or application that individuals see. Most individuals probably never think about the huge subsidies given to their automobiles. To the extent that they do, it is hard to believe that they understand the direct expenditure better than the tax expenditure. Psychological problems may prevent individuals from properly processing information, but it is hard to believe that it is dominant, or even important, in this context.[38] Moreover, it is not clear in which direction these psychological biases work.[39]

To the extent we believe the visibility argument, it may actually lead to a legislative preference for direct spending over tax programs rather than the other way around. For example, if a congressman fighting for constituents can either fight for a tax reduction or direct spending, and direct spending of an equal dollar amount is perceived to be greater by

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[37] See, for example, early writings by Stanley S. Surrey, The Congress and the Tax Lobbyist – How Special Tax Provisions Get enacted, 70 Harvard Law Review 1145 (1957); Cary, 68 Harvard Law Review (cited in note __). More recently, see Richard L. Doernberg and Fred S. McChesney, On the Accelerating Rate and Decreasing Durability of Tax Reform, 71 Minnesota Law Review 913 (1987).

[38] A different psychological argument against tax expenditures has been made based on public awareness as opposed to unawareness. The idea is that public resentment of tax benefits (due to inevitable controversies surrounding these benefits or perceptions of unfairness) is interrelated with regular tax provisions, which in turn undermines taxpayers' morale and compliance. Replacing tax expenditures with direct spending assists in redirecting public resentment away from the revenue collecting system. See Paul R. McDaniel, Evaluation of Particular Tax Expenditures, 8 Tax Notes 619, 625 (1979); Tax Expenditures, at 107; Edward Yorio, Equity, Efficiency, and the Tax Reform Act of 1986, 55 Fordham Law Review 395, 425-6 (1987). But see Edward A. Zelinsky, Efficiency and Income Taxes: The Rehabilitation fo Tax Incentives, 64 Texas Law Review 973, 1026-8 (1986); and Edward A. Zelinsky, The Tax Reform Act of 1986: A Response to Professor Yorio and His Vision of The Future of the Internal Revenue Code, 55 Fordham Law Review 885, 891-2 (1987).

[39] For example, Surrey believed that psychological effects may drive businessmen to oppose tax expenditures (Tax Expenditures, at 107), or some argue the IRS is perceived as a more favorable administering agency (McDaniel, 8 Tax Notes 619, 623 (1979) (cited in note __)), or that direct assistance programs carry stigma effects (see infra notes __, __).

the constituents, the congressman may prefer direct spending. The congressman gets more constituent bang for the same budgetary buck. Socially we may also prefer direct spending because if the program is rent seeking, it will take fewer direct spending dollars to satisfy the rent seeker who is subject to framing. Alternatively, lack of visibility may be a good thing rather than a bad thing. If the program is desirable but also one that individuals will tend to resist (like eating your vegetables), putting into the tax system could reduce opposition by making it invisible due to framing effects. There is no general theory.

To summarize, if programs are going to exist, the CTB literature has nothing to say about where or how the program should be implemented. To be fair to CTB advocates, many of the base broadening (and shrinking) proposals make sense, and we do not mean to claim that the literature is not valuable. But at the same time, it focuses exclusively on the tax system, essentially assuming the answer to the integration question.

B. *Tax-Expenditures*

The tax expenditure literature although related to the CTB literature, directly focuses on the integration question.[40] It offers many potential insights into the integration question but is also seriously flawed. We break our discussion of tax expenditures into three parts. First, we briefly review the basic idea of tax expenditures. We then discuss the chief criticism of the idea, the problem of the definition of tax expenditures. Finally, we discuss the merits of the substantive arguments made by the literature, concluding that one of the core intuitions has merit but that most of the details are unconvincing.

The basic idea behind tax expenditures is that any government program can be implemented through a direct expenditure or through the tax system. Any time the

[40]The following is a partial list of the literature: Pathways (cited in note __); Tax Expenditures (cited in note__); William D. Andrews, Personal Deductions in an Ideal Income Tax, 86 Harvard Law Review 309 (1972); 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) (cited in note __); See 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); Mark G. Kelman, Personal Deductions Revisited: Why They Fit Poorly in an 'Ideal' Income Tax and Why They Fit Worse in a Far from Ideal World, 31 Stanford Law Review 831 (1979); Edward A. Zelinsky, Efficiency and Income Taxes: The Rehabilitation fo Tax Incentives, 64 Texas Law Review 973 (1986) (cited in note __); Edward Yorio, Equity, Efficiency, and the Tax Reform Act of 1986, 55 Fordham Law Review 395 (1987) (cited in note__); Edward Yorio, The Future of Tax Ferorm: 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); Toder, 53 National tax Journal 361 (2000) (cited in note __). For a review of tax expenditures in OECD countries, see OECD, Tax Expenditures: Recent Experiences (Paris 1996).

government uses the tax system as opposed to a direct spending program, the government has created a what is labeled "tax expenditure."[41] The tax expenditure literature, primarily through the writings of Stanley Surrey, did three things with this insight. First, it tried to define the notion of tax expenditures. The core definition is that any deviation from a "normative income-tax" is a tax expenditure.[42] Thus, any deduction, exclusion, or credit that would not be allowed under some definition of income, is equivalent to a direct expenditure.[43] Second, it argued that the budget rules as then in effect distorted the process toward tax expenditures, particularly by hiding information about the costs of tax expenditures and by having more lenient procedures for enactment. The goal of the tax expenditure literature in this regard was to create a budgetary accounting for tax expenditures that mirrored that of direct expenditures and, thereby reduce the budgetary incentives to use tax expenditures. Third, the tax expenditures literature discussed the merits of tax expenditures, generally concluding that tax expenditures are an inferior method of implementing policy.

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[41] The 'tax expenditure' notion was looming in the CTB literature. See, for example, Joseph A. Pechman, Erosion of the Individual Income Tax, 10 National Tax Journal 1 (1957); Walter Blum, Tax Policy and Preferential Provisions in the Income Tax Base, Tax Revision Compendium, Vol.1, 77, 83 (1959); Joseph P. McKenna, Tax Loopholes: A Procedural Proposal, 16 National Tax Journal 63 (1963); Musgrave, 81 Harvard Law Review 44, 52 (1968) (cited in note __).

[42] Surrey and Helmuth, 22 National Tax Journal 528-9 (cited in note__); Pathways, at vii, 6-7 (cited in note__); Tax Expenditures, at 188 (cited in note__). See also discussions in Surrey and McDaniel, 20 Boston College Law Review 225, 227-53 (cited in note __); Surrey and McDaniel, 17 B.C. Ind. And Com. Law Review at 682-8 (cited in note __); Analytical Perspectives, Budget of the United States Government, Fiscal Year 2003, ch.6

[43] Likewise, any excess taxation over the normative tax base would be a 'tax penalty' or 'negative tax expenditure.' See Surrey and McDaniel, 20 Boston College Law Review 225, 242-5 (cited in note __); Surrey and McDaniel, at 43-4, 222-6 (1985). "Negative tax expenditures" have not been estimated so far in U.S. budgets. Initial study toward such estimation was presented in the budget for FY 2004. See Analytical Perspectives, Budget of the United States Government, Fiscal Year 2004, ch.6, Appendix.

The definition of tax expenditures has been well criticized in the literature.[44] A tax expenditure is said to be any deviation from a "normative" tax base. The normative tax base is an amended version of the comprehensive tax base (although in the tax expenditure literature, it is limited to an income tax),[45] and the particular details vary by individual tax expert.[46] Under this approach, if a particular deduction or credit falls within the normative tax

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[44]See Boris I. Bittker, Accounting for Federal "Tax Subsidies" in the National Budget, 22 National Tax Journal 244 (1969) (cite in note __); Boris I. Bittker, The Tax Expenditure Budget – A Reply to Professors Surrey & Hellmuth, 22 National Tax Journal 538 (1969); Walter Blum, Book Review, 1 Journal of Corporate Taxation 486 (1975); Kahn and Lehman, 54 Tax Notes 1661 (cited in note 6).

A more implicit criticism is found in Douglas A. Kahn, Accelerated Depreciation – Tax Expenditure or Proper Allowance for Measuring Net Income, 78 Michigan Law Review 1 (1979); Edward A. Zelinsky, The Tax Treatment of Qualified Plans: A Classic Defense of the Status Quo, 66 North Carolina Law Review 315 (1988) (Taking the bold position that following acceptable considerations of a 'normative' tax structure – e.g. liquidity, administrability, measurability – tax treatment of qualified pension plans can be regarded as part of that structure rather than a tax expenditure.); Charles E. McLure Jr., The Budget Process and Tax Simplification/Complication, 45 Tax Law Review 25, 54-56 (1989).

The President's budget also shows doubt about the determinacy and merit of the income tax base definition. See Analytical Perspectives (2003), at 95-7 (cited in note __). See also A Comprehensive Income Tax Base? A Debate (cited in note __) for a similar debate on the comprehensive tax base.

[45]The CTB is only the starting point. Practical considerations – e.g. administrability and political constrains – take one away from the pure Haig-Simons definition of income. See Surrey and Hellmuth (1969) at 530 (cited in note __): "The purpose of the tax expenditure budget is not to show what deviations form some 'ideal tax base' cost… It is not aimed directly at a comprehensive tax base." And at 531: "But the Treasury discussion and analysis at no point adopted Haig-Simons as the model for the tax expenditure study."

[46]Though Surrey was referring to some convention concerning a 'normative' income tax base – e.g. "widely accepted definitions of income and standards of business accounting", "generally accepted structure of an income tax" (quoting from the 1968 Treasury budget; Pathways, at 7,12), consensus among tax experts (Pathways, at 17; Surrey and Hellmuth, 22 National Tax Journal 528, 533 (1969)) – no such consensus necessarily exists. Bitkker, hence, argues that "every man can create his own set of 'tax expenditures,' but it will be no more than his collection of disparities between the income tax law as it is, and as he thinks it ought to be…" Indeed, a few experts have reached different conclusions concerning various tax expenditures. (Bitkker, 22 National Tax Journal 244, 260 (1969) (cited in note __).) Compare the analyses of medical expenses and charitable contributions by Prof. Andrews, Surrey, and Kelman; See Andrews, 86 Harvard Law Review 309 (cited in note __), Surrey's response in Pathways, at 20-1 (cited in note __), and Kelman reply in Kelman, 31 Stanford Law Review 831 (1979) (cited in note __). Compare also the analyses of accelerated depreciation by Prof. Kahn and Surrey. See Kahn, 78 Michigan Law Review 1 (cited in note __) and Pathways, at 100-3 (cited in note __). Additionally, see the analysis of qualified pension plans by Prof. Zelinsky (Edward A. Zelinsky, The Tax Treatment of Qualified Plans: A Classic Defense of the status Quo, 66 North Carolina Law Review 315 (1988) (cited in note __)). (See also the differentiated treatment of pension plans in OECD countries; OECD, Tax Expenditures: Recent Experiences, at 12 (cited in note __).) These analyses were conducted within Surrey's definitional framework yet deviate from his 'normative' income tax base. Further, Seymour Fiekowsky, Assistant Director in the Treasury's Office of Tax Analysis, argues that capital gains tax preference and accelerated depreciations should not be considered tax expenditures; Seymour Fiekowsky, The Relation of Tax Expenditures to the Distribution of the 'Fiscal Burden,' 2 Canadian Taxation 211, 215-6 (1980). See also a description of a controversy within the administration by Paul F. Harstad, Treasury and OMB Clash on Tax Expenditure Concept, 13 Tax Notes 1407 (1981). In addition, since 1983 the Administration has been preparing

base, none of the consequences of being a tax expenditure apply, while if it falls out of the normative tax base, all of the consequences apply.[47]

Bittker is the most prominent critic of this definition.[48] He argued that a comprehensive definition of income would include many items not on the tax expenditure list. For example, the tax expenditure list did not include the benefit of the cash method of accounting, the realization requirement, and imputed income from assets and housework. Moreover, he argued that in many areas, there is no widely accepted definition of the proper tax base. For example, there is no widely accepted degree of progressivity or of the scope of a family.[49]

Bittker is not merely accusing the tax expenditures advocates of inconsistency in defining tax expenditures. Instead, he is accusing them of making implicit policy judgments. If all of these exceptions from the tax expenditure list are based on policy judgments, so are the items on the list. Policy judgments, however, do not come from definitions. Instead, Bittker concludes that, short of a conceptual model, each exemption from the tax base has to be examined based on its own merits.[50]

Stated in the language we are using here, it is hard to see how the organization of a bureaucracy should depend on a definition of income. For example, if we are going to subsidize medical expenses, whether it is desirable to do so through the tax system should not

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a separate (narrower) tax expenditures list following a different income tax baseline from that of the Joint Committee on Taxation; see Analytical Perspectives (2003), at 97-113 (cited in note __). Additionally, the experience in other countries shows that definitions and tax expenditures lists vary substantially. See OECD, Tax Expenditures: Recent Experiences (cited in note __).

[47]The principal consequence, following Surrey's goal in his project to account to tax expenditures, is the application of regular government budgetary analysis and scrutiny; Surrey and Hellmuth (1969) at 530 (cited in note __).

[48]Bittker, 22 National Tax Journal 244 (1969) (cited in note __); Bittker, 22 National Tax Journal 538 (1969) (cited in note __). See supra note __. [tax expenditures critique.]

[49]The argument of the independency of a 'normative' tax base from other important features of a tax system follows from the analyses and critique of the CTB. The Haig-Simons definition of income does not serve as a complete prescription of an income tax base. In particular, it is independent of the tax rate structure, the proper measurement period, the proper taxable unit, the allowable deductions, the dividing line between personal and business expenses, and the taxation of organizations of individuals (e.g. taxation of corporation and shareholders). See, for example, Bitkker, A "Comprehensive Tax Base" (cited in note __), and Pechman, Harvard, at 65-6 (cited in note __).

[50]Bittker summarized his position as follows: "At bottom, however, every tax structure, whether on the books or projected, is an assemblage of value judgments on scores of issues that could plausibly have been decided differently. To bestow the label of 'correct" on any of these human creations is to misuse the term" Bittker, A Reply, National Tax Journal at 542 (cited in note __).

be dependent on whether a medical expense deduction meets the definition of income. Debates about the matter seem completely beside the point.[51] Similarly, Surrey's upside down subsidy argument, discussed below, only applies to items not meeting the definition of income.[52] It is hard to imagine that the distributional effects of a provision depend on meeting a definition.

Another way to see the problem with the definitional approach is to consider the integration question with respect to non-tax agencies, as suggested by Professors Kahn and Lehman.[53] Suppose, for example, we are trying to determine whether a conservation program should be put into the Interior Department, the Environmental Protection Agency, the Army Corp of Engineers, or somewhere else in the government. The answer depends on institutional factors not on definitions.[54] The same should be true for deciding whether a spending program should be put into the Internal Revenue Service.

The most heated offshoot of this debate about definitions is the debate about scope of the tax expenditure budget. At the time Surrey was writing, tax programs and direct spending programs were treated very differently by the budget system (and they still are). The budget reported the amounts spent on direct expenditures but did not report amounts spent through virtually identical programs in the tax system. The differences in the budget rules could distort outcomes. To remedy this, Surrey called for a "full accounting" of tax expenditures, and the result is the tax expenditure budget, which lists the costs of various items in the tax law.[55]

Some sort of definition of tax expenditures is necessary to have a tax expenditure budget. We must have some method of measuring tax expenditures if they are to be reported in the full accounting. As noted above and by numerous commentators, however, there is no *a priori* definition of the tax system. There is no such thing as the normative tax base.

The simultaneous need for a definition and the lack of grounding for any particular definition makes the tax expenditure budget problematic. For example, we must decide whether accelerated depreciation is a tax expenditure. It provides faster cost recovery than

[51] Compare, for example, Andrews (1972) (cited in note __) with Pathways, at 20-1 (cited in note __).

[52] See infra notes ___ [discussion of the upside-down subsidy] and accompanying text.

[53] See Kahn and Lehman, 54 Tax Notes 1661 (1992) (cited in note __).

[54] See a similar discussion in Herbert A. Simon, Administrative Behavior, 33-5 (New York 1947).

[55] A "tax expenditures" budget was first adopted by the Treasury Department in 1968. See Annual Report of the Secretary of the Treasury on the State of the Finances for Fiscal Year 1968, 326-40 (1969). The "tax expenditures" budget was adopted into law in the Congressional Budget Act of 1974, and since then is issued as a "special analysis."

economic depreciation but slower cost recovery than expensing. It can alternatively be viewed as a tax expenditure or tax penalty depending on whether one's baseline is an income tax or a consumption tax.[56] Critics claim the problems with definitions is fatal to the exercise.

Perhaps the reason for the heated debate is the normative consequence associated with being labeled a tax expenditure. Surrey's arguments, as well as those of the comprehensive tax base literature, generally condemn tax expenditures, so labeling is all important. Being put on the tax expenditure list indicated that the provision is a subsidy or government largesse while staying off the list indicated that the provision had the patina of good tax policy.[57]

If we reject the normative consequence of the label, however, the problem becomes much simpler. The problem is one of determining what information would be useful.[58] For example, it would be useful to know both how much tax revenue would go up if accelerated depreciation were to be replaced with straight line or economic depreciation and how much it would cost to replace it with expensing. One does not have to answer the question about which way of looking at the issue is right.

The decision about what information to release will be difficult and problematic . It will inevitably have a normative and political component.[59] But it would be a significantly lesser problem than deciding on the one true tax expenditures list. For example, information could be presented in a variety of ways under an "information usefulness" rationale while there is only one correct method under a traditional tax expenditures rationale.[60] Similarly, as has been suggested by others, the information could be limited to elements of the tax system that could conceivably be replaced with a direct expenditure program because it is only these

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[56] Adopting an income tax base obviously does not render a final answer. See Kahn, 78 Michigan Law Review 1 (1979) (cited in note __); Paul F. Harstad, Treasury and OMB Clash on Tax Expenditure Concept, 13 Tax Notes 1407 (1981); Karla W. Simon, The Budget Process and the Tax Law, 40 Tax Notes 627, 632-3 (1988).

[57] See, for instance, Prof. Thorunyi's description of the embarrassment in the Reagan administration caused by the inclusion of the ACRS in the tax expenditures budget. Thorunyi, Duke Law Journal 1155, 1184 (1988) (cited in note __).

[58] See Michael J. McIntyre, A Solution to the Problem of Defining a Tax Expenditure, 14 U.C. Davis Law Review 79 (1980) for a similar approach. See some hint to such approach in Bittker, 22 National Tax Journal 244, 260-1 (1969) (cited in note __), and in Carl S. Shoup, Surrey's Pathways to Tax Reform – A Review Article, 20 J. Finance 1329 (1975).

[59] Indeed, it will be susceptible to Bittker's original critique that exposing only some tax expenditures would act to conceal other undiscovered tax expenditures. See Bittker, 22 National Tax Journal 244, 258-9, 261 (1969) (cited in note __). Surrey believed that "the understanding to be gained through the tax expenditure approach outweighs this risk by far." (Pathways, at 19.) We tend to agree with Surrey on this point.

[60] See a hint of this approach in 2003 budget; Analytical Perspectives (2003), at 95-7 (cited in note __).

programs that can be distorted through budgetary non-neutrality.[61] Surrey's argument that the budget process could skew outcomes was correct and we should not let unrelated problems with his arguments get in the way of this truly valuable contribution.

Much of the debate about tax expenditures has focused on these definitional problems. Although Surrey apparently believed and cared about the definitional parts of his argument, the focus on definitions distracts from the underlying substantive arguments. Leaving aside definitions, the tax expenditure question really is the integration question. We believe that many of the substantive arguments made in the tax expenditures literature about integration are unconvincing, but that there is a core, unstated intuition that is valuable.

Surrey's substantive argument is that tax expenditures are an inferior method of implementing policy. Instead, the government should use direct spending programs. The reason is that tax expenditures tend to have a variety of features that lead to poor implementation. For example, Surrey argues that tax expenditures create so-called upside-down subsidies.[62] The upside-down subsidy is created because a tax deduction is worth more the higher the marginal tax rate, so that wealthy individuals with high marginal tax rates will receive more for a given deduction than lower income individuals. If one views tax expenditures as the same as the government handing out money, wealthy individuals get bigger handouts than the poor. Similarly, tax expenditures tend to be open-ended in the sense that they place no limits on the amount of tax benefits a taxpayer may receive,[63] and hence

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[61] See, e.g., Seymour Fiekowsky, The Relation of Tax Expenditures to the Distribution of the 'Fiscal Burden,' 2 Canadian Taxation 211, 215 (1980) (cited in note __), and Thorunyi, Duke Law Journal 1155 (1988) (cited in note __). The 'substitutability' approach, however, is still problematic since, at least theoretically, every policy is substitutable. For other arguments about the definition of tax expenditures, see Richard Goode, The Economic Definition of Income, in J. Pechman ed., Comprehensive Income Tax 1 (The Brooking Institution 1977) (suggesting an alternative to the tax expenditures budget including only those provisions for which there is evidence in the legislative history that the dominant motivation was to encourage or reward certain behavior or to compensate for particular hardship); Michael J. McIntyre, A Solution to the Problem of Defining a Tax Expenditure, 14 U.C. Davis Law Review 79 (1980) (proposing a purpose-dependent definition of tax expenditures); Roger S. Smith, Tax Expenditures: An Examination of Tax Incentives and Tax Preferences in the Canadian Federal Income Tax System, Canadian Tax Papers No. 61 (Toronto, 1979) (developing for the Canadian tax system a tax expenditures list based on approximate comprehensive income tax base definition).

[62] Pathways, at 134-8; Tax Expenditures, at 71-82.

[63] Pathways, at 140. Certification by another agency can limit the problem. See Tax Expenditures, at 102-3.

are not capped.[64] Additionally, tax expenditures are not subject to an annual appropriation.[65] Instead, they are like entitlements that are automatically appropriated absent some contrary congressional action.[66] Tax expenditures also tend to have relatively loose eligibility requirements in the sense that individuals self-declare their eligibility and are challenged only if they happen to be audited. And, Surrey argues, tax expenditures, in general, create more complexity than direct expenditures.[67]

The immediate response to these arguments is that we can design tax expenditures to be the same as direct expenditures. Indeed, Surrey began his argument by assuming that tax expenditures could be implemented in a way that was basically similar to direct expenditures.[68] If they have the same content, however, these criticisms do not apply. For

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[64]Nonetheless, note that capping tax expenditures is possible, though probably more complicated. Zelinsky explains that in principle tax expenditures can be capped, and provides evidence of such capping; Zelinsky, 64 Texas Law Review 973, 1030-1(1986) (cite in note __). It seems that Prof. McDaniel believes as well that capping is equally applicable to tax expenditures. See McDaniel, 8 Tax Notes 619, 622-3 (1979) (cited in note__). In addition note that the Low Income Housing Tax Credit, for example, is a capped tax expenditure program.

[65]'Sunsetting' tax expenditures (and other procedural methods) would subject them to periodic review analogous to that of direct expenditures. (Under a 'sunset' provision, a tax expenditure program automatically expires on a pre-specified date unless renewed.) See discussion of 'sunset' provision in McIntyre, The Sunset Bill: A Periodic Review for Tax Expenditures, 4 Tax Notes 3 (1976); Paul R. McDaniel, Institutional Procedures for Congressional Review of Tax Expenditures, 8 Tax Notes 659, 660 (1979); Surrey and McDeniel (1979) at 33-5, and Tax Expenditures, at 54-65. See also counter-arguments in Zelinsky, 64 Texas Law Review 973, 1029-30 (1986) (cited in note __). Yet, Graetz and Mashaw suggest that a stable long-term source of financing provided by the tax system can be beneficial to some policies- e.g. social security. See Michael J. Graetz and Jerry L. Mashaw, True Security: Rethinking American Social Insurance, at 302 (1999).

[66]Surrey and McDaniel, 20 Boston College Law Review 225, 232 (1979) (cited in note__). A few principal direct spending welfare programs are designed as entitlements as well – e.g. Social Security, Medicare, and Food Stamps.

[67]See infra note ___[complexity]. Surrey makes a host of other arguments: tax expenditures permit windfalls by paying taxpayers for doing what they would do anyway. (Pathways, at 134; Tax Expenditures, at 82-3); some tax expenditures are inefficient as the tax subsidies exceed the value of the induced activity (Tax Expenditures, at 83); some tax expenditures provide tax savings to middlemen – i.e. 'tax commission' – with a potential for tax sheltering activity (Tax Expenditures, at 83-5); tax legislative committees and executive departments lack necessary expertise, and so do tax service providers – e.g. lawyers, accountants (Pathways, at 141-3; Tax Expenditures, at 96); risk of log-rolling within the tax committee (Pathways, at 142); lack of coordination of the treatment of tax expenditures with the overall handling of direct spending. (Pathways, at 143-4); tax expenditures enjoy an unjustified budgetary priority (Tax Expenditures, at 32-3); tax expenditures add a second-level complexity produced by the responses of the market and counter-responses of the tax authorities (termed by others as 'transactional complexity') (Tax Expenditures, at 93); tax expenditures create psychological effects (Tax Expenditures, at 96-7); tax incentives distort choices (Pathways, at 138-9); tax expenditures keep tax rates high by constricting the tax base and thereby reducing revenue (Pathways, at 139-140).

[68]"It follows that a meaningful comparison between the tax incentive technique and the direct expenditures technique must involve *similar substantive programs*." Pathways, at 130. See also Paul R. McDaniel, Evaluation of Particular Tax Expenditures, 8 Tax Notes 619, 622 (1979) (cited in note __): "…it is clear that many differences that

example, if a tax expenditure has the same content as a direct spending program, it will not have the upside-down subsidy effect, it will not be open ended, the eligibility criteria will be the same, and it will not be more complex than the direct spending program.[69] Moreover, many new tax expenditures are designed to be more similar to direct spending programs than prior tax expenditures were. Congress now tends to use credits rather than deductions and has, where it thought appropriate, limited the size of the expenditure or the eligibility for the expenditure.

It is curious that someone as sophisticated as Surrey would make such an obvious mistake. While Surrey states that he wants to compare identical tax and direct expenditures, if he did so, his conclusion would have to be that they were identical. Instead, Surrey concludes that direct expenditures are superior to tax expenditures. He does so by comparing different programs notwithstanding starting off by stating that the programs can be made identical. Yet he does not justify why he compares different programs.

Perhaps Surrey compared different programs merely because that is what he observed. But we believe that there is a key, unstated intuition driving him toward this approach: institutions matter. If institutions matter, policies will be different when implemented by different institutions.[70] Thus, tax expenditures and direct expenditures will tend to have different features and should not be compared as if they were identical.

For example, the use of exclusions or deductions to implement tax expenditures may create the upside-down subsidy effect[71] but has an important offsetting feature: an exclusion

some persons purport to see between tax and direct expenditures are not actually differences inherent in the two techniques… these differences are largely matters of program design…Most debates over using a tax expenditure versus a direct expenditure approach to a problem are at bottom debates about two differently designed programs."

[69]Surrey acknowledged the possibility of designing tax expenditures to be identical to direct spending by using taxable, refundable credits (Pathways at 137-8; Tax Expenditures, at 108-111), 'sunset' provisions (Surrey and McDaniel, 20 Boston College Law Review 225, 33-5 (1979) (cited in note __); Tax expenditures, at 55-63), and subsidy limitations (Pathways, ch. VIII). See also Yoseph Edrey and Howard Abrams, Equitable Implementation of Tax Expenditures, 9 Virginia Tax Review 109 (1989) (They discuss equivalent designs of credits and deductions).

[70]Surrey explicitly considered institutions in his detailed review of the budgetary process (Tax Expenditures at ch. 2), and in his brief reference to the substantive specialization issue (Pathways at 141-6; Tax Expenditures at 96).

[71]Surrey was not necessarily accurate in his description of the distributional effects of tax expenditures; see Thomas D. Griffith, Theories of Personal Deduction in the Income Tax, 40 Hastings Law Journal 343 (1989). See also Gerald M. Brannon, Tax Expenditures and Income Distribution: A Theoretical Analysis of the Upside-Down Subsidy Argument, in Henry J. Aaron and Michael J. Boskin, ed., The Economics of Taxation 87 (The Brookings Institute, Washington 1980). (Arguing some upside-down subsidies may prove to be a socially desirable incentive design.) Blum offers a way to justify some upside-down subsidies; Blum, 1 Journal of Corporate Taxation 486, at 490 (cited in note __). Zelinsky further argues that in some circumstances an upside-down subsidy will be more efficient. (Zelinsky, 64 Texas Law Review 973, 1024-6 (1986) (cited in note __).) Feldstein, for example, asserts

is an incredibly simple method of implementing policy and a deduction is only a little bit more complicated. Similarly, self-declared eligibility is much simpler than other methods of implementing policy.

While these features could be made part of a direct spending program, they are a key benefit of integration because they take advantage of the existing infrastructure of tax collection. That is, integration allows for economies of scope in policy implementation with the resulting savings in administering and complying with the system. We would not necessarily want to design tax expenditures to be the same as direct expenditures. If we were going to do so, it would defeat the purpose behind putting a program into the tax system. We would lose the benefits of integration.

For example, if we want to subsidize the development of human capital, we can do so through direct spending programs that might, for example, subsidize training or education. An alternative is to defer taxation of the return to education.[72] Exclusion or deferral have many flaws, but a key, perhaps decisive, advantage is that they are incredibly simple. The current system is virtually transparent to individuals. Integration of the education subsidy with the tax system achieves this transparency better than a direct spending education program with identical substance.

One way to frame the question is to begin with a set of broad policy objectives and allow complete freedom in designing a program to meet these objectives. The objectives can be met in a variety of institutional settings and we should consider the best possible program as implemented in each of these different settings. Integration, for example, allows coordination of programs and the use of a common infrastructure for administering programs. But integrating two programs means we might give up on making each of them as accurate as they might have been with a specialized agency. We choose the method of implementation that offers the best results.

Surrey, then, had the key idea right even if it was not explained– we should not compare identical programs when making the integration decision. We should compare programs that are best designed for each institutional structure and determine which choice is best.

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that in the case of charitable contributions, tax expenditures are more efficient than direct spending. Yet, he compares a somewhat different mechanisms of transfers. See Martin Feldstein, A Contribution to The Theory of Tax Expenditures: The Case for Charitable Giving, in Henry J. Aaron and Michael J. Boskin, ed., The Economics of Taxation 99 (The Brookings Institute, Washington 1980).

[72] See Louis Kaplow, Human Capital Under an Ideal Income Tax, 80 Virginia Law Review 1477 (1994); Louis Kaplow, On the Divergence between 'Ideal' and Conventional Income-Tax Treatment of Human Capital, 86 American Economic Review 347 (1996).

Consider for example, Alstott's[73] discussion of the integration of welfare programs with the tax system. She focuses on whether the earned income credit, which can be viewed as a substitute for more traditional welfare programs, is a good idea but her arguments have broader application. Integrating welfare and tax systems may greatly simplify government policy – utilizing the existing institutions of the federal income tax.[74] If, however, welfare programs are designed as stand alone programs, they tend to test eligibility and provide benefits over short periods. The reason is that individuals' welfare needs can vary dramatically over short periods as some gets a job, loses a job, or has other life changes. The tax system uses annual accounting. If one uses the institutional structure of the tax system to implement a welfare program, one must almost inevitably use an annual accounting period. Therefore, one of the trade-offs of integration is that the program is less well-tailored to its needs – it will be less accurate. The trade-off is between the simplicity benefits of integration and the accuracy benefits of separation.

Note that this turns the usual complexity/simplicity arguments on their head. The usual argument is that putting programs into the tax system increases complexity. This argument is correct if one looks only at the tax system.[75] But if one considers government policy as a whole, integration with the tax system may often be a choice for simplicity. Integration is a choice to take advantage of the infrastructure of the tax system at the cost of less accuracy in program design than would be achieved through a separate agency.

Surrey's arguments do not hold up well under this type of analysis because he does not consider the benefits of design features that he observes. For example, the open-endedness and eligibility declaration criteria that he criticizes greatly simplify the system. He argues that we do not find these features in direct expenditure programs so they must be undesirable. But whether they are found in direct expenditure programs is entirely besides the point. The decision to put a program into the tax system can be seen as a decision that the accuracy costs of these features are less than the simplicity benefits of integration for those particular programs. We should expect to see different features in tax expenditures and direct expenditures. In fact, we should expect to see different features in tax expenditures and direct

[73] Alstott, 108 Harvard Law Review 533 (1995) (cited in note __).

[74] Id., at 564-5. Yet, later she doubt the potential of tax simplicity for other reasons. See discussion infra notes __ and accompanying text.

[75] Surrey has partially adopted a tax-centric view of complexity through his writings. (For example Pathways, at 33-35, 145; Tax Expenditures, at 105-6.) Yet, he was aware of its flaws, and actually did consider in a few places the complexity of the whole system. (See Pathways at 34; Tax Expenditures at 92-3; Surrey and McDaniel, 20 Boston College Law Review 225, 275-8 (1979) (cited in note __).) Nevertheless, his conclusion was that overall complexity is reduced when direct transfers replace tax expenditures. (See Tax Expenditures at 94; Surrey and McDaniel, 20 Boston College Law Review 225, 277 (1979) cited in note __).) Others, like Prof. Yorio, adopt this view as well; Yorio, 55 Fordham Law Review 395, 426-8 (1987) (cited in note __).

expenditures for precisely the reason that he justified in comparing different programs–because design features will and should vary with the institution implementing the program.

To summarize, the tax expenditures literature focuses on the integration question and does not take a NIMBY-type attitude, unlike the CTB literature. It gets confounded in unnecessary definitional debates, but it provides a key insight: when comparing methods of implementing policy, we should not compare identical programs. Instead we should compare how the policy is likely to be implemented in any given institutional structure. But within that framework, the arguments are unconvincing.

III. The Integration Question as Organizational Theory: Coordination and Specialization in Production

We view the integration question as one of how best to organize the government rather than a question of tax policy. This means that the relevant place to look is in the organizational literature rather than in the tax policy literature. The literature on organizations is vast, going back to Taylor's scientific management,[76] Weber's studies of bureaucracy,[77] Coase's theory of the firm,[78] Simon's theory of administrative organizations,[79] Chandler and Williamson's M and U theories,[80] Marschak and Radner's theory of teams,[81] and Niskanen's models of self-serving bureaucrats.[82] It continues in modern information processing models,[83] agency models,[84] and positive political science models.[85]

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[76] Frederick F. Taylor, The Principles of Scientific Management (New-York 1911); Frederick F. Taylor, Shop Management (New-York 1911); Frederick F. Taylor, Scientific Management (New-York 1947).

[77] For example, Max Weber, Bureaucracy, contained in Guenther Roth and Claus Wittich ed., Max Weber, Economy and Society: An Outline of Interpretive Sociology, 956 (New York 1968).

[78] Ronald H. Coase, The Nature of the Firm, 4 Economica 386 (1937).

[79] Simon, Administrative Behavior (1947) (cited in note __).

[80] Alfred D. Chandler, Strategy and structure : chapters in the history of the industrial enterprise (Cambridge 1962); Oliver E. Williamson, Markets and Hierarchies, Analysis and Antitrust Implications : A Study in the Economics of Internal Organization (New York 1975).

[81] Jacob Marschak and Roy Radner, Economic Theory of Teams (New haven 1972).

[82] William A. Niskanen, Bureaucracy and Representative Government (Chicago 1971).

[83] Also known as economics of management. The hierarchy is a common organizational feature studied in these models. This literature is vast. See, e.g., Masahiko Aoki, Horizontal vs. Vertical Information Structure of the Firm, 76 American Economic Review 971 (1986); Raaj Kumar Sah and Joseph E. Stiglitz, The Architecture of Economic Systems: Hierarchies and Polyarchies, 76 American Economic Review 716 (1986); John Geanakoplos and Paul Milgrom, A Theory of Hierarchies Based on Limited Managerial Attention, 5 Journal of the Japanese and International Economics 205 (1991); Roy Radner, Hierarchy: The Economics of Managing, 30 Journal of Economic Literature 1382 (1992); Patric Bolton and Mathias Dewatripont, The Firm as A Communication Network, 109

We address here only a relatively narrow question of organization theory. The question we must ask is how should we optimally split up an organization into divisions. If one thinks of a hierarchy as an upside-down tree, the question is the placement of vertical lines that split it into divisions or agencies. Much of the literature is on the number of layers or horizontal lines, which is related but not directly on point.[86] Other portions of the literature, particularly sociological works, are on the nature of leadership within organizations and are also not on point.[87] Theories of the firm are about boundaries, but the boundaries are usually between the market and the firm, not within the firm. It turns out, only a very small portion of the literature focuses on the optimal divisions issue.

We can break the applicable literature into three parts. The first part includes theories that assume away any divergence of preferences among individual agents. Following Marschak and Radner,[88] we will generally refer to this line of literature as team theory. Hierarchy arises in team theory because of limitations on information processing. Hierarchies split-up the decision making or information processing tasks into sub-units and allow

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Quarterly Journal of Economics 809 (1994); Timothy Van Zandt, Real-Time Decentralized Information Processing as a Model of Organizations with Boundedly Rational Agents, 66 Review of Economic Studies 633 (1998); Timothy Van Zandt, Decentralized Information Processing in the Theory of Organizations, in Murat R. Sertel ed., Contemporary Economic Issues, Proceedings of the 11th World Congress of the International Economic Association, vol. 4 Economic Behavior and Design 125 (London/New York 1999); Luis Garicano, Hierarchies and the Organization of Knowledge in Production, 108 Journal of Political Economy 874 (2000).

[84] M.J. Monsen and Anthony Downs, A Theory of Large Managerial Firms, 73 Journal of Political Economy 221 (1965); Oliver E. Williamson, Hierarchical Control and Optimum Firm Size, 75 Journal of Political Economy 123 (1967); Armen A. Alchian and Harold Demsetz, Production, Information Costs, and Economic Organization, 62 The American Economic Review 777 (1972); Martin Beckmann, Management Production Function and the Theory of the Firm, 14 Journal of Economic Theory 1 (1977); Guillermo A. Calvo and Stanislaw Wellisz, Supervision, Loss of Control, and the Optimum Size of the Firm, 86 Journal of Political Economy 943 (1978); Paul Milgrom and John Roberts, Economics, organization, and management (Prentice-Hall, N.J. 1992); Yingyi Qian, Incentives and Loss of Control in an Optimal Hierarchy, 61 Review of Economic Studies 527 (1994); Masahiko Aoki, The Contingent Governance of Teams: Analysis of Institutional Complementarity, 35 International Economic Review 657 (1994); Aghion and J. Tirole, Formal and Real Authority in Organizations, 105 Journal of Political Economy 1 (1997); George Baker, Robert Gibbons, and Kevin J. Murphy, Informal Authority in Organizations, 15 Journal of Law, Economics, and Organizations 56 (1999); Wouter Dessein, Authority and Communication in Organizations, 69 Review of Economic Studies 811 (2002).

[85] See supra note __ [congressional design literature]

[86] Simon, Administrative Behavior, at 26-8 (1947) (cited in note _); Monsen and Downs (1965) (cited in note __); Williamson (1967) (cited in note __); Calvo and Wellisz (1978) (cited in note __); Michael Keren and David Levhari, The Internal Organization of the Firm and the Shape of Average Costs, 14 Bell Journal of Economics 474 (1983); Sherwin Rosen, Authority, Control, and the Distribution of Earnings, 13 Bell Journal of Economics 311 (1982); Qian (1994) (cited in note __).

[87] Cite.

[88] See supra note ___

coordination of these subunits through higher tiers in the hierarchy. The shape of the hierarchy usually depends on the gains from specialization and the costs of coordination. Most of the team theory literature, however, focuses on the number of layers in a hierarchy. Our problem is how to divide the organization into divisions rather than how many layers of management it should have.[89] Nevertheless, the same intuitions about the trade-off between specialization and coordination follow through. This good government or good bureaucrat view of the world is consistent with Surrey's tax expenditures approach to the problem.

The second and larger part of the literature focuses on incentives. This literature assumes agents have some specialized knowledge that makes delegation attractive and in addition, that the agent has preferences that diverge from the principal's preferences. The goal is to set up a hierarchy that gets the benefit of organized production (e.g. agent's expertise) while minimizing shirking.[90] We can think of most tax expenditures as split delegations, where part of a policy is delegated to a specialized agency and part to the Internal Revenue Service. For example, much education policy is administered by the Department of Education but some is administered by the Internal Revenue Service.[91] Similarly, welfare is split between specialized welfare agencies and the Internal Revenue Service. The question is when the use of multiple agents is desirable.

The last piece of the puzzle is collective action or public choice problems. Much of this literature is closely related to the agency literature in that it generally assumes a politician or bureaucrat who cannot be fully monitored by the public, but the focus is on the problem of decision making or monitoring when there are a large number of diverse principals rather than one or a few principals.

In this paper we focus only on team theory as applied to the problem of divisions. The question is how we organize a bureaucracy when there is no divergence of preferences between agencies, the individuals who make up the agencies, and the legislature or principal. We start by examining the problem in a general context and then turn to how the analysis applies to bureaucracies and tax expenditures. The next section applies the analysis to two examples, food stamps and the earned income credit.

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[89] The reason is that while hierarchy is an organizational feature of information processing, the divisional structure stems from production tasks of the organization. Though a little confusing, as much of the integration problem involves informational issues, it is ultimately about the production of policy by various governmental agencies. See more infra section III.B.

[90] See supra note _____ [agency models]

[91] See supra note ___.[examples from section I]

A. *The General Problem of Divisions*

The key intuition is that there is a trade-off in deciding whether to separate a function into a division. Separating a function into a division allows specialization and coordination of activities within the division but increases coordination costs between that division and other activities of the firm. Think of a hotel company that separates the operation of its luxury hotels from its value hotels. The separation allows each division to specialize in providing a particular type of service and to coordinate those activities cheaply. But the separation means that coordination between the divisions will be more difficult. If coordination among activities is particularly important – say because adopting common standards or operating procedures will save costs – the benefit of specialization and coordination within an activity may not be worthwhile. Conversely, the more valuable specialization and coordination within a group of activities, and the less important coordination among groups, the more likely it will be a good idea to separate the groups.

The literature on these questions is vast, going back at least to Adam Smith.[92] Specialization adds value because it allows an individual or organization to perform the same activity more rapidly, more accurately, or better in some other dimension. Smith uses the example of a pin factory. A single individual can make very few pins in a given time period. A group of individuals each specializing in a single aspect of making pins, can vastly increase output.[93] The reason why is that specialization in particular elements of pin making allows individuals to perform the particular tasks more efficiently.

The key question is what limits specialization. Why not have a separate division for each individual function performed by the firm? The answer, as illustrated by Becker and Murphy[94] is that specialization is limited by the costs of coordination. Too much

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[92]Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations (New York 1937); D. Ricardo, The Principles of Political Economy and Taxation (London 1932); Allyn Young, Increasing Returns and Econmic Progress, 38 Economic Journal 527 (1928); George J. Stigler, The Division of Labor is Limited by the Extent of the Market, 59 The Journal of Political Economy 185 (1951); Hendrik. S. Houthakker, Economics and Biology: Specialization and Speciation, 9 Kyklos 181 (1956); Kenneth J. Arrow, The Limits of Organization (New York 1974); Sherwin Rosen, Substitution and Division of Labour, 45 Economica, New Series 235 (1978); K.J. Arrow, The Division of Labor in the Economy, the Polity, and Society, in Gerald P. Odriscoll, Adam Smith and Modern Economy 153 (Iowa State 1979); Yoram Barzal and Ben T. Yu, The Effect of the Utilization Rate on the Division of Labor, 22 Economic Inquiry 18 (1984); Gary S. Becker and Kevin M. Murphy, The Division of Labor, Coordination Costs, and Knowledge, 107 The Quarterly Journal of Economics 1137 (1992); Xiaokai Yang and Yew-Kwang Ng, Specialization and Economic Organization: A New Classical Microeconomic Framework (North-Holland 1993).

[93]Smith, An Inquiry into the Nature and Causes of the Wealth of Nations, at 4-5 (cited in note__).

[94]Becker and Murphy, 107 The Quarterly Journal of Economics 1137 (1992) (cited in note __).

specialization means that coordination of the specialized activities becomes difficult.[95] For example, pediatricians generally do not specialize in particular childhood diseases. While they would learn more about a disease through specialization, the additional knowledge would require greater expenses in coordinating their care with other pediatricians. The increased costs to individual patients of dealing with multiple specialists would usually outweigh the benefit. But we might see specialization when the benefit is sufficient. Thus, for example, we see specialization in certain very complex and serious childhood diseases such as cancer.

Our problem goes beyond specialization. We must decide not only how many groupings to have but also which activities to group together. For example, even if we knew that a company should be divided into six divisions, we would still have to decide which activities are to be put into each division. There is, to our knowledge, almost no formal literature on this topic.[96] Instead, the relevant literature dates back to the informal discussions of organizations from the 1970's and earlier. The classic works are the historical studies of

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[95]Note that coordination can take the form of either cooperation costs in team production processes or transaction costs in trading final goods. Coordination is required among specialized workers producing a single product or among specialized units in a roundabout production. For example, various units of one organization producing different electronic components of a single household appliance product must coordinate their production (e.g. adopt common production standards). Coordination may also be required between trading parties (e.g. consumers and manufacturers). In the doctor example, if there were too much specialization, the customers might have to see a large variety of doctors or hire an additional doctor to help coordinate specialists. Becker and Murphy focus on the first form of coordination while Houthakker emphasizes the latter form. See Becker and Murphy, 107 The Quarterly Journal of Economics 1137 (1992) (cited in note __) and Houthakker, 9 Kyklos 181 (1956) (cited in note __). Alchian and Demsetz, 62 The American Economic Review 777 (1972) (cited in note__) and Arrow, The Limits of Organization, 39-40, 55-8 (1974) (cited in note __) are examples of the first form of coordination; Hotelling's model (Harold Hotelling, Stability in Competition, 39 Economic Journal 41 (1929)) and Stigler, 59 The Journal of Political Economy 185 (1951) (cited in note __), can be perceived as examples of the latter form.

[96]Two notable exceptions are Jacques Cremer, A Partial Theory of the Optimal Organization of a Bureaucracy, 11 Bell Journal of Economics 683 (1980), and Oliver Hart and John Moore, On the Design of Hierarchies: Coordination versus Specialization, NBER Working Paper No. w7388 (1999). Modern hierarchy literature is of a very limited assistance due to its focus on specialization in management (or decision-making) rather than specialization in production tasks. (Simon makes a parallel distinction between 'vertical' and 'horizontal' specialization. See Simon, Administrative Behavior, at 9 (1947) (cited in note __)). Hierarchical models, by and large, ignore organizations' production level, or provide only a narrow consideration of it. The scope and number of divisions however is primarily deduced from production activities.

businesses by Chandler and the institutional economics of Williamson.[97] The key idea is complementarity – activities that benefit most from coordination should be grouped together.

Chandler observed that corporations were often originally organized functionally. Functional organization divides the firm into departments in charge of specific functions: sales, production, purchasing, etc. This functional organization was later termed "U" form, with the U standing for unitary.

The U-form has many advantages. It helps promote coordination and specialization within the functional areas. But Chandler observed that as the corporations grew, they discovered several problems with the U-form. One problem was that central management became overloaded with decisions about daily operations and coordination of the functional units, and they could not focus on strategic decisions. In addition, functional units created agency problems. Employees tended to concentrate on their functional specialties at the expense of the overall profitability of the firm. There was no easy way to monitor employee performance because management could not accurately determine profitability of functional subunits (because the subunits do not produce a marketable product on which to base transfer prices).

To resolve these problems, as corporations grew in size they tended to reorganize into a divisional structure, with each division organized around a product or product line. This form was later termed the M-form, with the M standing for multi-divisional. The divisions themselves could be organized along functional or U-form grounds, so that the firm would resemble a collection of smaller U-form companies.[98]

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[97] Chandler, Strategy and Structure (1962) (cited in note __); Williamson, Markets and Hierarchy (1975) (cited in note __). Earlier work on quite a similar subject was termed the 'dapartmentalization problem.' This informal literature investigates the way in which tasks or production processes are grouped together into organizational units, and hence how the divisionalized organization is formed. See, e.g., James G. March and Herbert A. Simon, Organizations, 12-33 (New-York 1958) and Luther Gulick, Notes on the Theory of Organization, in Luther Gulick and L. Urwick, ed., Papers on the Science of Administration 1 (Columbia University, New York 1937). Gulick, for example, addressed the question of grouping workers into departments, i.e. bases of departmentalization. Gulick presented four bases for grouping work units – purpose, process, clientele, and place. Organization by purpose, for instance, indicates assortment by the rendered service or manufactured product. All workers (or more generally, capital) required for a particular service/product would be grouped in one department. Organization by process, on the other hand, implies grouping all individuals who make use of the same special skill, knowledge, or technology. Gulick's 'purpose' and 'process' bases of groupings correspond Chandler's U and M classifications. The tradeoff between specialization and coordination in the design of organizational divisions is also discussed by Gulick. See also James A. Brickley, Clifford W. Smith, Jr., and Jerold L. Zimmerman, Managerial Economics and Organizational Architecture, Chapter 13 (Boston 2nd Ed., 2001)

[98] Earlier organizational theory described these forms of organization as process and purpose organizations. See March and Simon for a summary of the classical departmentalization theory, particularly, their description of Gulick's work. March and Simon, Organizations (1958) (cited in note __).

The M-form was thought to have solved many of the problems with the U-form. It separated strategic and operational functions so that management could focus on broad strategy and the operational functions could be coordinated within each division. It also allowed better monitoring of the performance of managers because divisions could be measured by profits, unlike functional pieces.[99]

The government is largely organized along the M form, that is, by purpose. The congressional committees, or executive branch agencies or departments are like operating divisions. Each provides a "product" to the public, such as tax collection, national security, or education. Like most corporations, it is not purely M-form. There are a few functional elements, such as a common payroll and pension system but as a whole, the government resembles an M-form company.

The conclusions from the M and U form literature gets us part of the way to an answer. To the extent the M form is better, we should divide an organization along product lines rather than by function. But the theory does not tell us how to determine the extent of a product line. Instead, it assumes that there will be some natural or obvious breakdown of the business into product lines. This, however, is not always the case, (and, in fact the scope of a "product line" is precisely the core problem of this paper). For example, it is not clear whether luxury and value hotels are separate products or whether particular types of services offered by pediatricians are separate products.

The idea implicit in the literature is that there should be a benefit to grouping activities together. The activities must be complementary. There must be some economy (e.g. economies of scope) to combining them. For example, Chandler quotes an internal memorandum of Dupont, then in the process of reorganization:[100]

> The most efficient results are obtained at least expense when we coordinate related effort and segregate unrelated effort. For example, purchase of materials is unrelated to the sale of a finished product in a much greater degree than manufacture and sales,

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[99]Empirical studies confirm Chandler's conjectures. See, e.g., Richard P. Rumelt, Strategy, Structure, and Economic Performance (Harvard University Press, 1974); Henry O. Armour and David J. Teece, Organizational Structure and Economic Performance: A Test of the Multidivisional Hypothesis, 9 Bell Journal of Economics106 (1978); Peter Steer and John Cable, Internal Organization and Profit: An Empirical Analysis of Large U.K. Companies, 27 Journal of Industrial Economics 13 (1978); R. S. Thompson, Internal Organization and Profit: A Note, 30 Journal of Industrial Economics 201 (1981); Robert E. Hoskisson and Craig S. Galbraith, The Effect of Quantum Versus Incremental M-form Reorganization on Performance: A Time-Series Exploration of Intervention Dynamics, 11 Journal of Management 11 (1985); Charles W. L. Hill, Internal Organization and Enterprise Performance: Some UK Evidence, 6 Managerial and Decision Economics, 210 (1985). See also a survey of the literature by Richard E. Caves, Industrial Organization, Corporate Strategy and Structure, 18 Journal of Economic Literature 64 (1980).

[100]Chandler, Strategy and structure at 69 (1962). Similar statements can be found by other companies.

or manufacture and purchasing; and legal work is still more unrelated to either of those before mentioned.

The intuition is nothing more than finding where the benefits of coordination of two functions, such as complementarity in performance, outweigh the benefits of keeping them separate, such as economies of scale or expertise.[101]

Williamson, one of the most prominent proponents of the M-theory, has only a brief discussion of how a company should set up its divisions and in the end, offers nothing more than the intuition from the Dupont memorandum.[102] In an example, Williamson considers a company that produces five distinct final products. There are three activity stages to producing these products: an early production stage, an intermediate state in which production is completed, and a marketing stage. Further, he assumes that all products originate in a common first stage, there are four distinct intermediate stage processes leading to the five distinct final products. This is represented in Figure 1.[103] Note that A_1 and A_2 are the same product and V_1 and V_2 are the same intermediate production process.

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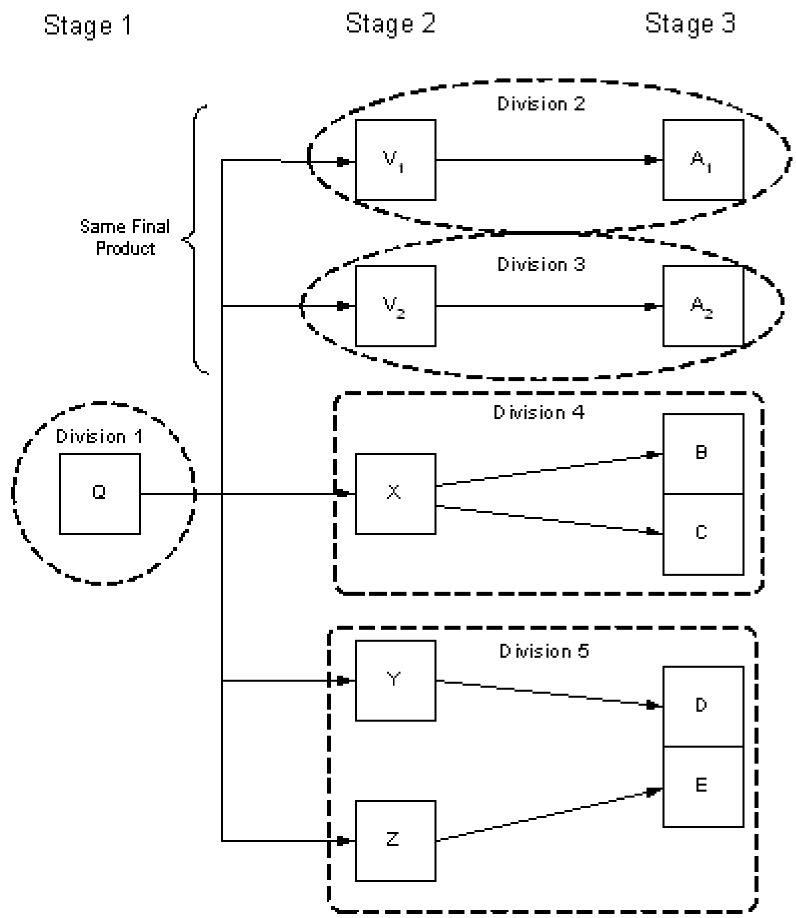
[101]Hirshleifer also discusses such complementarities Yet, his framework assumes a given divisional structure under which he considers coordination techniques. See Jack Hirshleifer, Economics of the Divisionalized Firm, 30 Journal of Business 96 (1957); Jack Hirshleifer, On the Economics of Transfer Pricing, 29 Journal of Business 172 (1956).

[102]Williamson, Markets and Hierarchies, at 136-141 (1975) (cited in note __).

[103] Figure 1 is a reproduction of Figure 7 in Williamson, id., at 139, using simplified notation.

Figure 2



Williamson then discusses how the company should be broken down into divisions. He separates the initial stage of production into a division on the theory that the economies of scale outweigh the benefits of separate production at this stage within each division. He combines the intermediate stages and the final stages into a set of divisions on the theory that there needs to a high degree of coordination between these stages. Product A is split into two divisions on territorial grounds, each combined with an intermediate stage of production. He assumes that there are economies of scope for the intermediate stage for products B and C and, therefore, combines them into a single division with a single intermediate stage. Finally, products D and E are assumed to be complements, so they should be marketed together even though they are produced at the intermediate stage by separate plants. Therefore, he combines D and E and each of their intermediate stages into a single division.

Williamson offers no clear theory for making these decisions. But the intuitions are similar to Dupont's. Grouping activities together allows coordination of the activities but reduces the benefits of specialization. We want to provide a partition or set of groups that best take advantage of coordination while minimizing the loss in specialization.[104]

The intuitions can be confirmed in a variety of common contexts. Consider how doctors design specialities. Doctors may specialize in eyes, in feet, or cancers, but rarely combine these specialties. It is common, however, for doctors to combine knowledge of ears, nose, and throat problems into a single practice. How can we explain this? Specializing in only eyes allows doctors to gain the benefits of specialization and coordination of knowledge about eyes with few problems of coordinating with other medical problems. Specializing in both eyes and feet seems ridiculous because there are few benefits to coordinating these activities or having specialized knowledge in both. But it makes sense to combine ears, nose, and throat practices because it is important to coordinate – problems in one area may be related to problems in other areas. These breakdowns in practice areas, which seem perfectly natural to us, reflect the basic logic of coordination and specialization.

The same is true within businesses. Going back to the hotel example, separation of luxury hotels into a separate division allows specialization in providing luxury hotels and coordination of those types of activities. At the same time, it makes coordination of luxury hotels and value hotels more difficult. The trade off is whether the benefits from

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[104] Simon (1973) came to very similar conclusions (though in the analysis of decision making):

> "Any division of labor among decisional subsystems creates externalities, which arise out of the interdependencies among the subsystems that are ignored. What is wanted is a factorization that minimizes the externalities . . . "

Herbert A. Simon, Applying Information Technology to Organization design, 33 Public Administration Review 268, 270 (1973).

There have been limited attempts to model the problem more formally. One of the models that comes closest to the problem discussed here is by Cremer; Cremer, 11 Bell Journal of Economics 683 (1980) (cited in note__). The organization, in Cremer's model, faces uncertainty in both future cost functions of its various production processes and future demand. Further, coordination in the short-run is not possible across departments but only within departments. Optimal organization of divisions minimizes the adverse effects of future uncertainties, or maximizes organization's ability to eliminate such effects. Thus, 'related' production tasks (or roundabout products) are those that future optimal transfers among them suffer larger uncertainties, and hence would benefit most from improved 'real time' (or short-run) coordination. The solution is intuitive: production tasks should be grouped together if transfers among them are sensitive to future uncertainties; additionally, production processes that face high uncertainty for themselves should be grouped with other substitutable processes.

One might suspect that business school textbooks would address this problem as it is a problem that managers must face on a daily basis. The closest we have found is in Brickley, Smith, and Zimmerman, Managerial Economics and Organizational Architecture, Chapter 13 (cited in note __). The discussion there largely parallels the discussion in the text. For example, they argue that "grouping people together within a subunit lowers the communication and coordination costs among the people *within the subunit*. . . . Managers, however, must devise methods of coordinating activities *across the subunits*." Id. at 318. See also Milrgrom and Roberts, Economics, Organization, and Management, at chapter 16 (cited in note __).

specialization and coordination within the luxury hotel market are greater than the costs of coordination with other parts of the company's business.

To summarize, the basic trade-off is an old one, between specialization and coordination. More divisions promote specialization and coordination within the divisions and increase coordination costs between them. In deciding how to place tasks within a division or how many divisions, we have to look at the benefits of the various groupings given these costs.

B. *Departmentalization in a Governmental Context*

The literature largely focuses on the organization of entities competing in the market.[105] Our problem is slightly different – we want to determine the best organization of a government bureaucracy that is producing and administering policy. This section develops intuitions about the organization of bureaucracies. Like in the market context, the intuitions are based on the benefit of specialization and coordination when different groupings of activities are applied.

The key difference between government and market contexts is that there is no obvious measure to determine how well the government is doing (unlike say profits or stock price in the market context). Ultimately, we should measure government output by measures of how well the government produces and implements policy. There is, however, no uniformly agreed upon metric for measuring government policy.

Because our question is about bureaucratic organization, we can assume that the basic policy has been set by the principal (the executive or the legislature). We can then measure how well the bureaucracy implements that policy by measuring how accurate the implementation is for a given cost.[106] A more accurate policy better distinguishes between different individuals or different actions. It comes closer to the optimum. Accuracy, however, is expensive, which means that no policy will be implemented with perfect accuracy.

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[105] Gulick, Notes on the Theory of Organization (1937) and Simon, Administrative Behavior (1947) (cited in note__) are exceptions.

[106] A more general metric would be a social welfare function. Ultimately, welfare is the only relevant goal in this context. We use accuracy as a surrogate because it is simpler to measure and can be applied more easily to practical situations. One way to think about this approach is as dividing the execution of public policy into planning and implementing. We are interested here in the second stage. Bureaucratic performance is measured, then, relative to a perfectly accurate plan.

There are other metrics that might be important. For example, procedural theories might count the process by which we reach policy decisions as important and might be willing to trade off some accuracy to achieve procedural goals.

There are a number of prior works that discuss the trade off between accuracy and the costs of producing accuracy, commonly labeled complexity.[107] For our purposes, we can simply think of the problem as trading off marginal benefits and marginal costs. For example, a single speed limit for all roads would be highly inaccurate. We can increase accuracy by posting separate speed limits for different roads, although this increases costs. We could make the speed limit policy more accurate by posting different speed limits for individual roads under various weather and traffic conditions, but this would further increase costs. At some point, the marginal increase in costs is not worth the marginal benefit of the increases in accuracy.

The key difference between these approaches and the issue presented here is that here, the costs of producing accurate policy will vary with institutional structure. The independent variable is not how much accuracy to produce given some cost of production. Instead, the independent variable is the institutional structure which then determines the trade off between accuracy and complexity.

Given this setup, the analysis works basically the same as it does in the private sector. Grouping activities together allows coordination of those activities but reduces coordination of those activities with others. Smaller groupings allow more specialization, larger groupings, more coordination. The key is to group activities that are related, in that there are large benefits to coordination and low costs to the loss of specialization.

For example, consider the Internal Revenue Service and the Department of Agriculture. The IRS can presumably measure income at a given level of accuracy better than the Department of Agriculture because of specialization by the IRS in income measurement. Similarly, the Department of Agriculture can presumably best measure items related to agriculture, such as the value of various farming techniques or the safety of various methods of preparing food. Separating these activities allows this specialization. Separating these activities, however, creates coordination problems. While the lack of coordination between these activities will look like bad policymaking, it may be optimal – setting up the bureaucracy in a way that coordinates the activities of the USDA and the IRS will reduce the benefit of each of these agencies specializing in their own activities.

Analyses that look only at one aspect of the problem rather than overall government policy can be faulty. For example, Victor Thuronyi noted:

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[107] See Isaac Ehrlich and Richard A. Posner, An Economic Analysis of Legal Rulemaking, 3 Journal of Legal Studies 257 (1974); Colin S. Diver, The Optimal Precision of Administrative Rules, 93 Yale Law Journal 65 (1983); Louis Kaplow, Accuracy, Complexity, and the Income Tax, Journal of Law, 41 Economics, and Organizations 61 (1998); Shlomo Yitzhaki, A Note on Optimal Taxation and Administrative Costs, 69 American Economic Review 475 (1979); John D. Wilson, On the Optimal Tax Base for Commodity Taxation, 79 American Economic Review 1196 (1989).

> "The diary farmer subsidies include accelerated depreciation deductions on livestock and equipment and the acceptance of 'cash accounting,' both of which defer tax liability with no interest. While these tax provisions subsidize production and encourage herd expansion, the Department of Agriculture, on the other hand, pays diary farmers to curtail production and slaughter their herds.[108]

While this combination of policies seen insane, it may be the result of the best possible choice of organizational form. The IRS might be the best agency for providing investment subsidies and the Department of Agriculture is probably the best agency for regulating farmers. Certainly, neither agency would seem to be best at doing both activities. Therefore, separate agencies for each function is probably optimal. The result will inevitably be lack of coordination and crazy results like this.[109] But any other organizational form might be worse. It is not that we should applaud the end result and it certainly should be fixed, but even if we fix this one case, separation of functions into divisions is going to lead to lack of coordination. An organizational form that produces better coordination may very well be inferior on other grounds and, therefore, the lack of coordination may be optimal.

This analysis flips the usual complaints about tax expenditures on its head. Many claim that tax expenditures increase the complexity of the tax system.[110] Under the analysis here, a decision to have separate spending programs is a decision to have specialization in each program, presumably with more accurate and detailed measurements within each program. A decision to combine spending programs is a decision to coordinate the programs but with perhaps less accuracy in each program. Therefore, putting a program into the tax system can be seen as a decision for simplicity.

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[108]Thuronyi "Tax Expenditures: A Reassessment," Duke Law Journal 1155, 1161 (1988) (cited in note__). As McDaniel points out failures of coordination can go from duplication of similar programs, through the pursuit of different policies in the same area with no apparent reasons for such differences, to the implementation of diametrically opposite programs. See Paul R. McDaniel, Institutional Procedures for Congressional Review of Tax Expenditures, 8 Tax Notes 659, 660 (1979) (cited in note __).

[109]See also general descriptions of lack of coordination within government in Pathways, at ___; Thuronyi, Duke Law Journal 1155, 1170-2 (1988) (cited in note __); See Surrey and McDeniel, 17 B.C. Ind. And Com. Law Review 679, 717-22 (1976) (cited in note __); Surrey and McDeniel, 20 Boston College Law Review 225, 335-6 (1979) (cited in note __); Pathways, at 141-2 (cited in note __) (Skeptical about any potential coordination.); Tax Expenditures, at 106-7 (cited in note __) (coordination will be incomplete and cumbersome); McDaniel, 8 Tax Notes 659 (1979) (cited in note __) (examining various coordination promoting procedures); Stanley S. Surrey and Paul R. McDaniel, The Tax Expenditure Concept and the Legislative Process, in Henry J. Aaron and Michael J. Boskin, ed., The Economics of Taxation 123, 136-9, 143-4 (The Brookings Institute, Washington 1980) (describing a legislative process and suggesting mechanisms of coordination.); Karla W. Simon, The Budget Process and the Tax Law, 40 Tax Notes 627 (1988) (Stressing the need for coordination in the budgetary process and suggests some option for better coordination.) Zelinsky holds a more optimistic view regarding potential and actual coordination. Zelinsky, 102 Yale Law Journal 1165, 1169-70 fn 16-8 (1993) (cited in note __). Note that the tax expenditures literature mainly stresses the coordination difficulties in the legislative process.

[110]See infra note ____. [complexity]

To see this, consider another example. Suppose we are considering whether parts of the welfare system should be integrated into the tax system, as the earned income credit is. We must compare the benefits of having two programs and two administrative agencies (a special agency to administer the welfare part of fiscal policy and the tax agency to administer the tax part) to the benefits of having a single agency administering both programs.

If we have separate programs, each program can be more easily tailored to meet its specific goals. For example, if it is desirable to have monthly accounting periods for welfare and annual for tax, each program can adopt the desired period. Similarly, if the welfare system requires one measurement of "need" and tax system optimally uses a different measurement of "ability to pay," each program can adopt the required definition. Separation may enable administrative specialization in specific requirements of each policy, and hence improve its accuracy.

The disadvantage of separate agencies is that the various welfare programs and the tax system may not be coordinated very well. For example, welfare programs typically contain phase-outs which act as a marginal tax on income. Failing to coordinate these phase-outs can lead to very high marginal rates and a marginal rate structure that seems random.[111]

In addition, each welfare program might use its own eligibility test, which might mean that individuals end up providing similar but slightly different information to various government agencies. For example, the same child might qualify as a family member under one program but not under another, or various elements of income might be included in one program but not another, creating enormous complexity for individuals.[112]

We can generalize this example. Which integrated transfer programs are likely to be successful? Programs where the coordination benefits between the tax system and the other program are high and the specialization benefits of separate programs are low. Thus, we want

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[111]Daniel Shaviro, Effective Marginal Tax Rates on Low-Income Households, 84 Tax Notes 1191 (1999). See a simulated example of a strange tax structure and potential excessive tax rate (over 100%) in Frank Sammartino, Eric Toder, and Elaine Maag, Providing Federal Assistance for Low-Income Families through the Tax System: A Primer, discussion paper, the Urban Institute 38-9 and table 6 (2002).

[112]For example, the "qualified child" requirement of EIC is different than dependents requirements of other welfare programs. Unfortunately, EIC's 'qualified child' definition is also different from dependency requirements for purposes of child tax credit and dependent exemption. See George K. Yin, John K. Scholz, Jonathan B. Forman, and Mark J. Mazur, Improving the Delivery of Benefits to the Working Poor: Proposals to Reform the Earned Income Tax Credit, 11 American Journal of Tax Policy 225, 27-4 (1994); Janet Holtzblatt and Janet McCubbin, Administrative Issues with Law-Income Tax Filers, paper prepared for a conference - "Tax Crisis in Tax Administration" (2002). In fact, Janet McCubbin, EITC Noncompliance: The Determinants of the Misreporting of Children, 53 National Tax Journal 1135, 1141-2 (2000) estimates that there is not much of an actual difference in reality between the definitions. That is, adopting the dependent definition for EIC purposes may not impair the program's accuracy considerably.

to integrate programs that have close complementarities with the tax system – e.g. programs that measure along similar margins. This is why welfare and tax are such an obvious paring. They measure along very similar boundaries.

One scholar, Eric Toder, recently provided a list of the features that make programs a good or bad fit to be administered by the IRS.[113] Several items on this list relate to budgetary aspects of the problem, which we do not deal with here. Most of the remaining items relate to the benefits of coordination and specialization and can be explained by our framework. For example Toder argues that if the agency has a high degree of discretion in setting policies, implementing the program through the tax system may be unwise.[114] The reason must be that if the agency has discretion, it will be using expertise to make determinations, which mean that the value of specialization is high.[115] Toder also argues that the more that the spending program uses tax return data for eligibility, the more desirable integration is.[116] This easily fits within our framework – the IRS has expertise in measuring along those margins, and it exhibits economies of scope in such measurement. Toder argues that programs that have open ended eligibility are better suited to the tax system than other programs.[117] The reason is that the tax system ideally has open ended eligibility so programs that require up front eligibility testing would require specialization that would not be complementary with that of the IRS. Toder's suggestions seem eminently sensible within our framework.

The problem with the intuitions is that the terms are extremely vague and are at a very high level of generality. Translating these terms into measurable formula for making decisions is far from an easy task. But relatively crude ideas about accuracy, complexity, specialization, and coordination can help policy makers muddle through the problems in front of them. To see this, in the next section we go through two examples in detail.

IV. Applications: The Earned Income Credit and Food Stamps

This section applies the framework developed above to two major welfare programs – the Earned Income Credit (EIC) and the Food Stamps Program (FSP). The welfare system is of special interest in the analysis of the integration question. In 1998 about $400 billion were

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[113]Toder, 53 National Tax Journal 361 (2000) (cited in note __) [in the introduction]

[114]Id., at 366-7, 369. See also 2003 budget, at 114.

[115]See Epstein and O'Halloran, Delegating Powers (cited in note __) for an explanation of delegation based on expertise.

[116]Toder, 53 National Tax Journal 361 (2000), at 369 (cited in note __).

[117]Id., at 369 (cited in note __).

spent on more than 80 means-tested programs in the U.S.[118] Total spending on cash and in-kind welfare benefits is more than five times higher in 1998 than in 1968 (adjusted for inflation), while U.S. population rose in 35% during this period.[119] The share of the federal budget used for means-tested programs rose from 6.4% in 1968 to 16.8% in 1998.[120] In addition, the composition of tax expenditures has changed significantly over the last two decades of the 20th century. Social tax expenditures as a percentage of GDP gave increased over 40% during this period while business tax expenditures have been cut in half. Social tax expenditures accounted for 79% of all tax expenditures in 1999 and 57% in 1980.[121] These trends underscore the importance and relevance of the integration problem to welfare reform.

We chose to compare the EIC to the FSP for three reasons. First, the programs are to some extent similar, yet one is integrated into the tax system and one is not.[122] Comparison of the performance of the two gives us some sense of the costs and benefits of integration. Second, plausible cases can be made for integrating both programs with the tax system primarily because their eligibility criteria are income-based. In addition, there are serious problems with integrating each of the programs with the tax system. Therefore, they make interesting programs to study.

Finally, since these two programs are among the largest welfare programs in the

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[118] See Vee Burke, Cash and Noncash Benefits for Persons with Limited Income: Eligibility Rules, Recipient and Expenditure Data, FY1996-FY1998, Congressional Research Service (1999). Note that these figures do not include tax transfers (besides the EIC). See also GAO, Means-Tested Programs: Determining Financial Eligibility is Cumbersome and Can be Simplified, GAO-02-58 (2002). In 1975, as a comparison, there were more than 100 income maintenance programs, not including tax transfers. See Irene Lurie, Integrating Income Maintenance Programs: Problems and Solutions, in Irene Lurie ed., Integrating Income Maintenance Programs, 1, 4-5 (1975).

[119] Burke (1999) (cited in note __)

[120] Id.

[121] See Eric Toder, The Changing Composition of Tax Incentives: 1980-1999, Proceedings of the 91st Annual Conference of the National Tax Association (1998). Note that 'social tax expenditures' are defined broadly by Toder and include more than merely low-income assistance.

[122] Both programs are intended to help the indigent or the less fortunate and, therefore use similar eligibility requirements. There are, of course, important differences in the programs. The EIC is intended as a work incentive while the FSP is designed to reduce hunger. In addition, the EIC is a cash benefit while food stamps are in-kind. In addition, there may be essentially random differences in the programs - i.e. differences that do not follow from institutional structure. For example, the USDA applies a quality control system to the FSP. A decision to have a quality control system may not be related to institutional expertise, but instead to other non-systematic variables such as tradition, organizational behavior, etc. Because of these differences, the data must be interpreted with caution.

U.S.,[123] and perhaps also for the first two reasons, there has been a large number of studies on the delivery of benefits of this sort through the tax system,[124] so rather than building from scratch, we can analyze the conclusions of these studies within our framework.[125] Much of the earlier work on combining tax and transfer systems concerned the negative income tax, with the basic claim being that benefits can be distributed more efficiently through the tax system.[126] We agree with the idea that some benefits can best be distributed through the tax system and, in particular, believe that provision of the EIC through the tax system makes sense. But we will argue, contrary to the thrust of the negative income tax literature, that some welfare policies are best implemented separately because of institutional considerations.

Our analysis will follow in part Anne Alstott's work on the EIC. She is a critic of arguments for integrating tax and transfer systems, arguing that the tax system cannot adequately perform many functions of the transfer system. For example, she argues that the

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[123]In FY 1997, for example, the EIC was the third largest welfare transfer program in the U.S. (after Medicaid and SSI), and the FSP immediately followed as fourth ((Measured in annual dollar expenditures). See V. Burke, Cash and Noncash Benefits for Persons with Limited Income: Eligibility Rules, Recipient and Expenditure Data, FY 1996-1998, Washington: Congressional Research Service.

[124]A very partial list of recent papers includes the following. <u>EIC</u>: John Karl Scholz The Earned Income Credit: Participation, Compliance, and Antipoverty Effectiveness, 47 National Tax Journal 63 (1994); Yin et al., 11 American Journal of Tax Policy 225 (1994) (cited in note __); Alstott, 108 Harvard Law Review 533 (1995) (cited in note__); Toder, 53 National Tax Journal 361 (2000) (cited in note__); Janet Holtzblatt, Choosing Between Refundable Tax Credits and Spending Prgrams, Proceedings of the 93rd Annual Conference of the National Tax Association 116 (2000); Janet McCubbin, EITC Noncompliance: The Determinants of the Misreporting of Children, 53 National Tax Journal 1135 (2000) (cited in note __); Diane Lim Rogers and Alan Weil, Welfare Reform and the Role of Tax Policy, 53 National Tax Journal 385 (2000); Jeffrey B. Liebman, Who Are the Ineligible EITC Recipients? 53 National Tax Journal 1165 (2000); David T. Ellwood, The Impact of the Earned Income Tax Credit and Social Policy Reforms on Work, Marriage, and Living Arrangements, 53 National Tax Journal 1063 (2000); Timothy M. Smeeding, Katherin R. Phillips, and Michael O'Connor, The EITC: Expectation, Knowledge, Use, and Economic and Social Mobility, 53 National Tax Journal 1187 (2000); Lisa Barrow and Leslie McGranahan, The Effects of the Earned Income Credit on the Seasonality of Household Expenditures, 53 National Tax Journal 1211 (2000); Janet Holtzblatt and Robert Rebele in, Measuring the Effect of the EITC on Marriage Penalties and Bonuses, 53 National Tax Journal 1107 (2000); Jennifer L. Romich and Thomas Weisner, How Families View and Use the EITC: Advance Payment versus Lump Sum Delivery, 53 National Tax Journal 1245 (2000); Janet McCubbin, EITC Noncompliance: The Determinants of the Misreporting of Children, 53 National Tax Journal 1135 (2000) (cited in note __). <u>FSP</u>: J. Currie, U.S. Food and Nutrition Programs, in Robert Moffitt ed., Means-Tested Transfer Programs in the U.S. (forthcoming); see numerous studies on USDA website (http://www.fns.usda.gov/fsp) and by research institutions such as the Joint Center for Poverty Research (http://www.jcpr.org), the Center on Budget and Policy Priorities (http://www.cbpp.org/pubs/fa.htm; http://www.cbpp.org/12-19-01fa.htm), the Urban Institute (http://www.urban.org), and the Brookings Institute (http://www.brook.edu).

[125]Probably for similar reasons several other studies also compare the EIC and FSP. See, e.g., Holtzblatt, Proceedings of the 93rd Annual Conference of the National Tax Association 116 (2000) (cite in note __); Rochelle Stanfield, Social Policy and the Tax System, The Urban Institute (2002).

[126]See supra note 7.

tax system cannot respond as quickly to emergencies as the transfer system can. Alstott's arguments can be analyzed witin our framework and are largely consistent with it. Our conclusions in many places are different than hers, but to a large extent, the particular conclusions are less important than the mode of analysis. Therefore, we will use her work as a focus of our discussion.[127]

We begin with background on each of the programs and then discuss the reasons for integration of tax and transfer systems. We then turn to the details of each program and conclude with a brief discussion of negative income taxes more generally.

A. *Background*

The FSP is an in-kind transfer program[128] jointly administered by the USDA and state agencies.[129] It provides food assistance to families and individuals based on their monthly income, asssets, and family structure. Monthly income is effectively cash income with several exemptions and deductions.[130] Monthly income must be below a threshold which varies with family size and composition. Household assets typically cannot exceed $2,000, excluding certain assets (e.g. house and lot, vehicles of specific use or of limited value, and most retirement pension plans).[131] Benefits levels vary according to family size and composition,

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[127]Others make arguments similar to those made by Alstott. See, e.g., Asimow and Klein, 8 Harvard Journal on Legislation 1 (1970) (cited in note __); Yin et al., 11 American Journal of Tax Policy 225 (1994) (cited in note __); Rogers and Weil, 53 National Tax Journal 385 (2000) (cited in note __); Toder, 53 National Tax Journal 361 (2000) (cited in note __).

[128]Scholars view the FSP as an in-kind transfer. See, e.g., Robert Moffitt, Economic Effects of Means-Tested Transfers in the U.S., NBER Working Paper 8730 (2002). In fact, the FSP can be viewed as a voucher program because the government does not actually provide food to recipients. Instead, it gives individuals coupons that can only be used to buy food at certified establishments. The difference between in-kind provision and vouchers that can only be used at approved places, however, is unclear. The distinction is also not well defined in public economics textbooks. Joseph E. Stiglitz, Economic of the Public Sector, 388-9 (New York/London, 3rd ed., 2000) identifies food stamp as an in-kind program. Harvey S. Rosen, Public finance, __ (Boston 5th ed., 1999) identifies food stamps as a voucher program (though later he analyzes it as an in-kind program). Indeed, David F. Bradford and Daniel N. Shaviro, The Economics of Vouchers, NBER Working Paper No. 7092 (1999) argue that the precise definitional boundary drawn between voucher and in-kind is of little importance and what matters are programs' actual effects given their characteristics. Most descriptions of the FSP describe it as providing in-kind benefits, so we use that language.

[129]For descriptions of the FSP, see Currie (forthcoming) (cited in note __); USDA, Food and Nutrition Service, Nutrition and Evaluation, Characteristics of Food Stamp Households: Fiscal Year 2000, Report No. FSP-01-CHAR (2001).

[130]See 7 U.S.C. section 2014(d), (e).

[131]The accounted assets are mostly cash and other assets that can be easily converted into cash (e.g. money in checking account or saving accounts, saving certificates, stock or bonds). Vehicles are only narrowly included (excluding, for example, vehicle used to produce earned income), and then only over a specified $ threshold. See 7

such as whether a family member is elderly or disabled. Benefits are calculated by taking the maximum benefit for a household of a given size and composition and subtracting 30% of its net income, effectively imposing a 30% tax rate on beneficiaries.[132]

Eligibility for food stamps is determined in advance. To apply for benefits, food stamp applicants must visit a state office in person during regular business hours. Applicants must complete a lengthy application (typically 12 pages) and provide extensive documentation to support the claim.[133] Over 40 percent of food stamp applicants make two or more trips to the state office to complete the initial application process. Eligibility must be recertified throughout the year, often on a monthly basis and often requiring return visits to the state offices.[134]

The EIC is a wage subsidy implemented as a refundable tax credit.[135] As wages rise to specified levels, the credit increases, eventually plateaus, and then phases out. The levels phase-ins and phase-outs depend on family size with larger families generally receiving more generous benefits. Participants claim eligibility on their tax return without any prior certification process. Participants are, however, subject to ex post audits through both data

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U.S.C. section 2014(g). The valuation of vehicles has proved to be a major hurdle for state agencies and has been constantly simplified. See infra note __. [last paragraph on 'Measurement Criteria'] Note that the asset rule in other means-tested programs is similar - i.e. includes mostly cash and cash-like assets. See generally GAO-02-58 (cited in note __).

[132]Additionally, families are required to meet two income eligibility standards - a gross income standard and a net income standard. See 7 U.S.C. section 2014.

[133]See Michael Ponza, James C. Ohls, Lorenzo Moreno, Amy Zambrowski, and Rhoda Cohen, Cuntomer Service in the Food Stamp Program: Final Report, Mathematica Policy Research, Inc. (1999) and Holtzblatt, Proceedings of the 93rd Annual Conference of the National Tax Association 116 (2000) (cited in note __). The Indiana application, for example, while only 2 pages long, requires applicants to provide extensive documentation including records showing place of birth, marriage certificates, life and medical insurance policies and premium payment book, bank statements, records of stocks, bonds and other assets, make, model, age, and amount owed on any vehicle, records of all income including social security benefits, child support, contribution, and earnings (pay stubs showing name, place and employer's statement), and receipts for all expenses, including child care, shelter costs (such as rent, utilities, and tax statements), medical expenses, such as doctor's bills, prescription receipts, insurance premium book reimbursements, and child support (including the court order showing the amount ordered). See the application available online at http://www.in.gov/icpr/webfile/formsdiv/30465.pdf . Collecting this documentation is a formidable task.

[134]See Dorothy Rosenbaum, Improving Access to Food Stamps: New Reporting Options Can Reduce Administrative Burdens and Error Rates, Center on Budget and Policy Priorities (2000).

[135]See infra note __.

matching and other auditing techniques.[136] Typically, benefits are paid once a year after the individual files a tax return. To the extent the credit offsets taxes otherwise due, individuals can adjust their wage withholding to get some of the benefits during the year. In addition, the credit can be obtained during the year through an advance payment system,[137] although, as discussed below, this option is rarely used.[138]

The argument for integration of transfer programs such as the EIC and the FSP with the tax system is that integration enhances administrative efficiency by reducing bureaucratic costs and complexity.[139] In the language of the framework proposed here, there are benefits to specialization and coordination from integration.

The benefits to specialization arise because the FSP and the EIC (and for that matter, virtually all means-tested welfare programs) rely on similar criteria, such as income. The IRS is specialized in measuring these amounts and, therefore, is likely to be able to take these measurements more accurately and more cheaply than other agencies, such as the USDA.[140] In addition, integration (as a form of coordination) would save the costs of processing the same or similar information more than once by making use of an existing measurement system. Integration would also save coordination costs of the recipients, eliminating the need

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[136] Auditing for the EIC is quite extensive as the IRS continually attempts to lower the rate of overpayments. See Liebman, 53 National Tax Journal 1165 (2000) (cited in note__) and Hotz and Scholz (forthcoming) (cited in note __) for a discussion of the IRS enforcement efforts.

[137] See IRC section 3705.

[138] See infra note __.

[139] Alstott, 108 Harvard Law Review 533, 564-5 (1995). Others have made an argument for integration based on stigma. The idea is that providing transfer benefits through the tax system will reduce the stigma associated with welfare. See also infra note __. We do not address this argument here.

[140] For example, almost half of all FSP payment errors are due to an incorrect determination of the household's income, and that is when more FSP recipients earn no income. GAO, "Food Stamp Program: State's Use of Options and Waivers to Improve Program Administration and Promote Access," February 2002, GAO-02-409.

The definition of a family used in the FSP – a group of people who live together and customarily purchase food and prepare meals together – is different from the definitions found in the tax law. But it is not necessarily more accurate than and may be less accurate than the various definitions found in the tax law. Moreover, if this definition is important for some reason, it could be added to the long list of family definitions already found in the tax law. See, for example, (I.R.C. sections 1(a), (b), (d)); a family defined for purposes of limitations on deductions and constructive ownership rules (I.R.C. sections 267(b)(1), 267(c)(4)); a family defined for purposes of personal credit for household and dependent care (I.R.C. section 21); dependents defined for purposes of dependent deductions (I.R.C. section 152); dependents defined for EIC purposes (I.R.C. section 32(c)(3)), and somewhat differently for purposes of child tax credit (I.R.C. section 24(c)); a parent defined for purposes of taxing services by children (I.R.C. section 73).

to fill out multiple forms and visit multiple government offices.[141]

The benefits to coordination also arise because tax and transfer programs interact with each other on a wide variety of margins. For example, phase-outs of means tested programs increase marginal tax rates and, as noted, failure to coordinate phase-outs can create extremely high marginal tax rates for low income individuals.[142] Similarly, the amount of benefits for any program should depend on amounts provided by other programs. For example, a family receiving the EIC might less need food stamps or vice versa.[143] Definitions of marriage and family also need to be coordinated. For example, both the tax law and welfare programs can create a marriage penalties or bonuses and coordination of programs to limit the effects on marriage may be important.[144]

Empirical evidence on accuracy and complexity[145] of the EIC and the FSP further

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[141]For example, GAO reports that a low-income family applying for the 11 major assistance programs in the U.S. would need to complete anywhere from 6 to 8 applications (all providing much of the same information) and visit up to six offices. See GAO-02-58 (cited in note __).

[142]See infra note __.

[143]Cross inclusion (or exclusion) of benefits in different transfer program affects both the cumulative marginal tax rate and the total benefits provided by various transfer programs. For example, FSP's deduction for shelter expenses functions as an additional housing subsidy for food stamp recipients; the inclusion of AFDC benefits in the FSP benefits formula reduce the cumulative marginal tax rate of FSP and TANF. See, e.g., Thad W. Mirer, Alternative Approaches to Integrating Income Transfer Programs, in Irene Lurie ed., Integrating Income Maintenance Programs, 147 (1975) and Henry J. Aaron, Alternative Ways to Increase Work Effort under Income Maintenance Systems, in Irene Lurie ed., Integrating Income Maintenance Programs, 161 (1975) .

[144]Other possible interactions can affect out-of-wedlock childbearing, fertility, living arrangements, investment in assets (and accordingly market prices of such assets; e.g. low-value cars under FSP rules), savings, etc.

A striking example of mis-coordination across government agencies is the absence of non-integrated welfare programs from government's distributional schedules. None of the Congressional or Treasury Department staffs (i.e. the Joint Committee on Taxation, the Congressional Budget Office, and the Treasury's Office of Tax Analysis) includes in its distributional schedules non-tax assistance programs. See also Michael J. Graetz, Paint-by-Numbers Tax Lawmaking, 95 Columbia Law Review 609 (1995). Overlooking non-tax welfare policy inevitably induces erroneous analysis of redistribution, efficiency, and stabilization factors, and hence produces misguided fiscal policy and outcomes. See also Edgar K. Browning, Redistribution and the Welfare system (Washington 1975).

[145]Complexity of the fiscal system, or of any single fiscal policy, can be measured by the amount of economic resources required by all constituents (i.e. administration and fiscal units) to implement that system or policy. That is, administrative and compliance costs are the components of fiscal complexity. See Joel Slemrod, Optimal Tax Simplification: Toward A Framework for Analysis, Proceedings of the 76th Annual Conference of the National Tax Association 158 (1983); Joel Slemrod, Optimal Taxation and Optimal Tax Systems, 4 Journal of Economic Perspectives,157 (1990); Joel Slemrod Did the Tax Reform of 1986 Simplify Tax Matters?, 6 Journal of Economic Perspectives 45 (1992). Holtzblatt, Proceedings of the 93rd Annual Conference of the National Tax Association 116 (2000), for example, applies Slemrod's complexity index. Further note that other measures of complexity (e.g. number of volumes, sections, regulations, words, letters, etc.) can not constitute a reliable coherent

support the argument for integration. Subject to data and conceptual limitations, the key facts are that the FSP costs more to implement than the EIC by an order of magnitude but the FSP is not any more accurate than the EIC (although it produces a very different pattern of errors).

In particular, annual administrative costs of the FSP are estimated to be about $4 billion per year.[146] In addition, individual compliance costs are likely to be high because of the certification, recertification, and reporting requirements.[147] There are no firm estimates for the administrative costs of implementing the EIC because the IRS does not separately account for the cost of administering this program. About 95% of EIC claimants would file tax returns even if not eligible for the EIC, which means that the IRS would process most of the information anyway and individuals would incur the cost of filing returns anyway.[148] (Individuals must file an extra form with their return to claim the EIC, which increases their costs somewhat.) The EIC also creates additional audits, which impose costs on both the government and individuals. Given these facts, estimates have put the EIC administrative costs at about $0.32 billion, or less than one tenth of the FSP costs.[149] At this cost, the EIC

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measure.

[146]These costs constitute 19% of FSP costs, or about 24% of distributed benefits (for FY 1998); see Holtzblatt, Proceedings of the 93rd Annual Conference of the National Tax Association 116, 121 (2000) (cited in note __). Similar estimates can be found in Hotz and Scholz (forthcoming) and in GAO "Food Stamp Program: States Seek to Reduce Payment Errors and Program Complexity" (January 2001) GAO-01-272. To get a better grip of these costs, compare it to the annual administrative costs of managing the whole tax system; the entire IRS budget in FY 1998 was $7.3 billion, and the IRS served over 122 million individual taxpayers and 5 million corporations.

[147]For a description of these procedural requirement see Rosenbaum, Center on Budget and Policy Priorities (2000) (cited in note __). Unfortunately, no empirical quantitative data of FSP compliance costs are available. Holstzblatt (2000) (cited in note __), Ponza et al., Mathematica Policy Research, Inc. (1999) (cited in note __), and Susan Bartlett, Nancy R. Burstein, Gary Silverstein, and Dorothy Rosenbaum, The food Stamp Application Process: Office Operations and Client Experiences, Abt Associates Inc. (1992) provide a qualitative measures of applicants' compliance costs. These measures show that the cost of complying with FSP are much higher than the cost of complying with the EIC. See also supra note __ [Indiana application]. In addition, a verification process increases compliance costs for related third parties (e.g. employers). Acknowledging these problems, the administration has been moving lately toward a simplified measurement system. See infra note __ [Rosenbaum and GAO-02-409 and GAO, Food Stamp Program: States Seek to Reduce Payment Errors and Program Complexity, GAO-01-272 (2001)]

[148]See Hotzblatt (2000), at 121 (cited in note __) and Hotz and Scholz (forthcoming) (cited in note__).

[149] The administrative cost were calculated as 1% of the EIC distributed benefits on FY 1999. Forman cites the GAO estimating EIC's administrative costs to be around 1% of the program's costs. Jonathan B. Forman, How to Reduce the Compliance Burden of the Earned Income Credit on Low-Income Workers and on the Internal Revenue Serive, 48 Oklahoma Law Review 63 (1995). Liebman estimates EITC administrative costs to be less than 1% of transferred benefits. Jeffrey B. Liebman, The EITC Compliance Problem, Joint Center of Policy Research News (1998) <http://www.ksg.harvard.edu/jeffreyliebman/jcprsurvey.htm . Further, as a suggestive measure, IRS administrative costs of tax collection are around 0.4% of collected revenue.

provides twice the total dollar benefits of the FSP.[150] Thus, the FSP has much higher administrative and compliance costs than does the EIC.[151]

Notwithstanding the vastly higher administrative and compliance costs of the FSP, it is not clear that it is any more accurate.[152] The FSP has a lower error rate than the EIC, but also a much lower participation rate. EIC overpayments are around 29%[153] while FSP are around 7%.[154] Under payments are similar - EIC under payments are below 2.5% and FSP are around 2.9%.[155] On the other hand, EIC participation rate is about 89%[156] while FSP

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[150] EIC benefits provided on 1999 were $31.9 billion while food stamp benefits amounted to $15.8 billion.

[151] Additionally, for some decades scholars argue that tax transfers may prove less stigmatizing. Paul Samuelson, Economics, at 762 (New-York, 11th ed., 1980); Robert Moffitt, An Economic Model of Welfare Stigma, 73 American Economic Review1023 (1983); David T. Ellwood, Poor Support, at 115 (1988); Rogers and Weil, 53 National Tax Journal 385, 396-7 (2000) (cited in note __); (Further, much research on this subject is conducted by sociologists.) For instance, some evidence of stigma effects is found for the provision of food stamps; see Ponza et al., Mathematica Policy Research, Inc., at 66-70 (1999) (cited in note __). Yet, stigma effects may possibly arise under the tax system as well; See Smeeding et al., 53 National Tax Journal 1187, 1189 (2000) (cited in note __). It is hard to assess the effects of stigma and probably a large part of it is already included in programs' participation numbers.

[152] It is difficult to measure accuracy directly. Accuracy is usually measured by looking at under and over provision of benefits and we follow that tradition here.

[153] The IRS has conducted a few EIC compliance studies: Internal Revenue Service, Study of EITC Files for Tax Year 1994, April 1997, Washington D.C. (The study finds over payment of 25.8% for FY 1994); Internal Revenue Service, Compliance Estimates for Earned Income Tax Credit Claimed on 1997 Returns (09/2000) (the study finds over payments of 23.8%-25.6% for FY 1997); Internal Revenue Service, Compliance Estimates for Earned Income Tax Credit Claimed on 1999 Returns (02/2002) (the study finds over payments of 27%-31.7% for FY 1999). Estimates of over-payments in the last couple of studies may have been exaggerated since they did not account for offsetting errors in regard to the AGI tiebreaker rule. (The AGI tiebreaker rule may have caused a maximal over-estimation of 17% of total errors.) See explanation in the reports.

[154] Reported in GAO-01-272 for FY 1999. In other fiscal years the numbers are similar.

[155] See supra note __ [IRS reports].

[156] See U.S. General Accounting Office, Earned Income Tax Credit Eligibility and Participation, GAO-02-290R (2001). All other studies of participation rate of EIC measured household participation percentage rather than the total dollar benefits claimed by eligible households. See Scholz (1994) (cited in note __) (calculates participation rates between 80% to 86%); Jeffrey B. Liebamn, The Impact of the Earned Income Tax Credit on Labor Supply and Taxpayer Compliance, Ph.D. dissertation, Harvard University (1996) (estimates participation rates between 70% to 88% along the income scale); Marsha Blumenthal, Brian Erard, and Chin-Chin Ho, Participation and Compliance with the Earned Income Tax Credit, unpublished manuscript (2001) (simulate a participation rate of 91.6%). (Note that all studies used different methods and were applied to different time periods.) As a suggestive comparison to these studies, the mentioned GAO study estimates a 75% participation rate in household numbers.

participation rate is around 70%.[157] Thus, we get the following picture:

	Under Provision	Over Provision
EIC	13.5%	29%
FSP	33%	7%

We may not weigh these types of errors equally, so we cannot say for certain how these numbers compare, but we see no overwhelming reasons that the FSP error rate is preferable (and we will argue below that in fact the EIC error rate is preferable).[158] For example, the USDA and GAO, in analyzing the FSP, weigh them equally.[159] Therefore, using under- and over-provision to measure accuracy, the FSP, while generating a different type of error than the EIC, cannot be said to be more accurate than the EIC, even though it costs ten times as much to administer and is only one half the size.

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[157] Karen Cunningham, Trends In Food Stamp Program Participation Rates: 1994-2000, Mathematica Policy Research, Inc., at 2-5 (2002). (This rate excludes 3 outstanding years: 1994-6.) Participation rates in households numbers are typically below 60%. See Moffitt, NBER working paper 8730(2002) (cited in note __)

There is also trafficking in food stamps of about 4% of the total awarded. It is not clear how to count this. They could be counted as overpayments because a payment goes to an ineligible individual but they can also be counted as underpayments because the eligible recipient (who has sold his food stamps for cash) is not receiving the intended benefit. The right answer is probably somewhere in between.

Studies of Food stamps trafficking in retail stores can be found in T.F. Macaluso, “The Extent of Trafficking in the Food Stamp Program” (Food and Nutrition Service, USDA; 1995). See T.F. Macaluso, “The Extent of Trafficking in the Food Stamp Program: An Update” USDA, Food and Nutrition Service (2000). These studies found that 4% and 3.5% of issued food stamps were trafficked in retail stores during FY 1993 and 1996-1998 period, respectively. See the latter study for some estimations’ caveats. Additionally, there is no data on the extent of food stamp trafficking between individuals prior to retail transactions.

[158] Think, for example, of the following two kinds of errors: (i) a well off household (say, with a monthly income of $10,000) enjoying an erroneous fiscal windfall of $100; and (ii) a needy family, who can hardly sustain a reasonable shelter and enough nutritious food during any month, missing by error a monthly payment of $100. The question being what kind of error requires more public scrutiny. (See some hint for a similar intuition by Alstott, 108 Harvard Law Review 533 (1995) at fn138 and accompanying text.)

[159] For example, the USDA operates a quality control system monitoring states’ operations in their food stamps provision in order to improve accuracy in implementation. USDA determines either fiscal sanctions or enhanced funding for each state annually according to its error rate. USDA’s common practice is to combine under and overpayments, weighting them equally, into a cumulative measure of error. Yet, oddly, the quality control system applies only under and over-payments criteria and ignores non-participation rates. See USDA, Food Stamp Quality Control Annual Report; Fiscal Year 1998, Food and Nutrition Service, Program Accountability Division, Quality Control Branch (2000); Rosenbaum, Center on Budget and Policy Priorities (2000) (cited in note __). This practice is followed also in the GAO report on FSP errors. See GAO, Food Stamp Program: States Seek to Reduce Payment Errors and Program Complexity, GAO-01-272 (2001).

The question posed here is whether a change in institutional structure can improve performance of either the EIC or the FSP. The argument is similar to the argument for a negative income tax. The idea is that a single approach to need or to well-being should be used in the tax and transfer system. A consistent methodology makes sense from a policy perspective – need is need and there is no reason to change the approach when the tax goes from positive to negative. There is nothing special about zero.[160] In addition, there are great institutional advantages to a single system, such as the savings on administrative and compliance costs.[161]

B. *Food Stamps*

Given these reasons for integrating the FSP into the tax system, one might think that the answer is clear. There are, however, a number of aspects of the FSP that are not complementary with the tax system. Integration might involve compromises these aspects of program design.

There are four areas of concern, three of them found in Alstott's discussion of the EIC, and a fourth not applicable to the EIC and therefore, not discussed by Alstott.[162] First, there are important differences in eligibility measurements and criteria in the tax system and the FSP. Arguably, an ideal transfer system might use different measurements than an ideal tax system. If the systems were integrated, they ideally would use a single set of criteria, so integrating the two would involve a loss of accuracy. Second, the pattern of errors, between compliance and participation, is different in the two systems. Integrating the FSP into the tax system would likely substitute the tax pattern of errors for the FSP pattern of errors. Third, the tax system tends to use long measurement periods to measure permanent changes in well-being while welfare systems use short prospective measurement periods to be responsive to temporary changes in circumstances. The last, not mentioned in Alstott because she focuses on the EIC, is that food stamps are provided in-kind while the tax system is specialized in collecting and distributing cash.

We review these considerations below, showing how they relate to issues of specialization and coordination and fit within the general framework discussed above. To

[160] Alstott, for example, describes how different welfare programs strike different balances between the same traded off variables. Alstott, 108 Harvard Law Review 533, 567-8 (1995) (cited in note __). However, she does not explain why, or if, it is optimal. One may hypothesize that it is the consequence of uncoordinated policy implementation. See further supra note __ and accompanying text. [measurement criteria.]

[161] See supra notes ___ and accompanying text [surrey and alstott- common supporting arguments]

[162] Although the thrust of her paper is on the EIC, she notes that her arguments also apply to other means-tested transfer programs. Similar arguments can be found in Rogers and Weil, 53 National Tax Journal 385 (2000) (cited in note __).

some extent our conclusions differ from Alstott's conclusions regarding similar issues with respect to the EIC, based on our analysis and review of the evidence. In particular, we conclude that only the responsiveness problem – the problem of measurement periods – presents an obstacle to integration of food stamps into the tax system. The data on responsiveness is mixed and we uncertain of what the costs in responsiveness from integration would be, but there is at least a significant chance that the responsiveness problem is sufficiently serious to merit caution in integrating the programs. We do not want to put too much stress on these differences, however. Instead, our goal is to show how the analysis fits directly into the institutional framework we posed above.

1. Measurement criteria

On the surface, the tax system as well as almost all means-tested transfer programs use similar eligibility criteria, usually income, assets, family composition, and perhaps special status, such as disabled or elderly. This commonality is the primary reason integration of welfare policy seems potentially attractive. Nevertheless, as Alstott notes, there are important differences.

In particular, Alstott argues that the income tax system tends to use a less accurate measurement of income and other resources than traditional transfer programs.[163] Most transfer programs attempt to measure all sources of cash available to meet the living expenses of a family, with limited deductions. For example, the eligibility criteria for food stamps look to all cash income, allowing deductions (other than standard deductions and a fixed deduction against earned income) mainly for the dependent care, medical expenses, and excess shelter costs.[164] The tax system, however, excludes many sources of wealth such as retirement benefits and interest on state and local bonds.[165]

Transfer programs also tend to measure asset values, which is not generally done in the tax system. Thus, food stamps limit eligibility to families with less than $2,000 in certain assets, with some adjustments for vehicles.[166] By contrast, the EIC does not have an asset or wealth test.

[163]Alstott, 108 Harvard Law Review 533, 566-579 (1995) (cited in note __)

[164]Yet, the definition of Gross Income excludes a few sources of income as well. See 7 U.S.C. section 2014(d).

[165]Yet, even Alstott admits that welfare programs' income definition are not necessarily more comprehensive than tax definitions. See Alstott, 108 Harvard Law Review 533 (1995) at fn148.

[166]See supra note __ [FSP description]

A similar argument can be made with respect to the definition of a family.[167] Current tax law has a very narrow definition of family, generally treating even children in the same household as separate taxpayers. Income transfer programs in contrast, adopt a broader definition of family that includes most individuals who live together. For example, the FSP uses its own specific household definition - i.e. a group of people who live together and customarily purchase food and prepare meals together.

Adopting the tax definitions might create problems for a transfer system. As Alstott notes, in the 1960s and 1970s when the negative income tax was receiving serious academic attention, scholars argued that the income definition in the tax law was inadequate for transfer programs.[168] The tax system's measurement of income is sufficiently crude that some families have received the EIC even though their incomes, if measured using a comprehensive base could be as much as $75,000.[169]

This conclusion argues against integration. One of the main advantages to integrating transfer programs such as the FSP into the tax system is to use common definitions and infrastructure. In the framework of this paper, integration can take advantage of specialization and coordination much better if common definitions are used. But using tax definitions might result in a significant loss of accuracy for the FSP.

There are several responses to these arguments. First, it is not clear why transfer systems and the tax system use different definitions. Alstott merely observes that they do and argues that integration would involve a compromise of current practices. But to determine the social cost of such a change, we need to understand why the different programs use different definitions. As noted, there is nothing special about zero that should make us want to use different definitions. For example, it is not clear why we should care more about accuracy when taking thousands or millions as taxes from a very wealthy individual than when giving very small sums as transfers to a poor individual.[170]

Second, assuming that the tax system is inaccurate, we must weigh the value of accuracy against its cost. If the savings from integration are substantial, it may be worth the loss in accuracy. Merely noting that there might be a loss in accuracy is insufficient.

Third, even if transfer programs use more accurate definitions of income, they are

[167] Alstott, 108 Harvard Law Review 533, 576-9 (1995).

[168] See Alstott, 108 Harvard Law Review 533, 573 (1995) (quoting James Tobin, Raising the Incomes of the Poor, in Agenda for the Nation 113 (Kermit Gordon ed., 1968).

[169] Id., at 575.

[170] It appears to be the case politically that we treat the two differently. We are not sure of the reason why.

unlikely to be very good at measurement. In fact, notwithstanding attempts to measure well-being carefully in the FSP, almost half of all FSP errors are due to an incorrect determination of the household's income.[171] The tax system, on the other hand, specializes in income measurement and has invested billions of dollars in this expertise, including in computer systems that can match income reports and in agents trained to ferret out fraud. There are, of course, substantial mismeasurments by the tax system, but our guess is that for any given measure of income, the specialization of the tax system is likely to result in better measurement per dollar spent. Therefore, it is not clear that the attempt at higher accuracy in transfer systems such as the FSP actually achieves it.

Finally, even if different definitions of well-being are necessary for food stamps and taxes, the tax system might be the best place to administer the different definitions because the IRS might still be the best at measuring along those margins even if the particulars of the measurement differ. That is, merely because we are going to have the complexity of different definitions of well-being for different programs does not mean that integration does not make sense.[172] For example, the FSP measures wealth to determine eligibility while the EIC does not.[173] Under FSP rules, however, the wealth measurement is largely limited to cash-like assets. These assets - with a clear market value - can be easily measured by the tax system.[174] In sum, our view is that the problem of different measurement criteria is not a good argument against integrating the FSP into the tax system.

2. Error Patterns

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[171]GAO-02-409 (cited in note __).

[172]The IRS actually uses different definitions and identifies various taxable entities for different purposes. We do not see why it will require "radical and costly changes in the tax system" (Alstott, 108 Harvard Law Review 533, 568 (1995) (cited in note __).) It will obviously be costly, but we believe, for the reasons stated in the text, it will still be cheaper than a non-integrated implmentation.

[173]Further note that the marginal value of accuracy added by the measurement of countable resources on top of income measurement may be negligible. The USDA reports that 88.3% of households on food stamps have less than $500 in countable resources, while the limit is $2000. See USDA, Characteristics of Food Stamp Households: Fiscal Year 2000, Food and Nutrition Service, Report No. FSP-01-CHAR, Table A-3 (2001).

[174]The measurement of the value of vehicles will be complicated. The valuation of vehicle has been a very complicated task for state agencies, and the inclusion and valuation rules has been continually eased. See, e.g., GAO, Food Stamp Program: States' Use of Options and Waivers to Improve Program Administration and Promote Access, GAO-02-409 (cited in note __). The necessity of the vehicle test is doubtful. The USDA ran a demonstration program that essentially exempted one vehicle per FS household from valuation. The study estimates an increase of only 6% in participating households and about 3% increase in FS benefits. See Nancy Wemmerus and Bruce Gottlieb, Relaxing the FSP Vehicle Asset Test: Finding from the North Carolina Demonstration, USDA (1999). Recently, states were given large flexibility in shaping a FS vehicle rule that suits their needs. A recent survey found that half of the states chose to essentially exempt all vehicles of FS household; most of the rest used some other lenient rule. See Stacy Dean and Ray Horng, States' Vehicle Asset Policies in the Food Stamp Program, The Center on Budget and Policy Priorities (2003).

As noted, food stamps have a low participation rate but also have a low overpayment rate. Both facts are likely attributable to the eligibility process. Precertification is very costly for low income individuals which discourages FSP applicants but at the same time weeds out false claims.[175] The EIC has a high participation rate but also a high overpayment rate. These facts are likely due to the lack of a precertification process. Individuals need merely to file a tax return to claim the EIC. Most individuals claiming the EIC must file a return anyway, so the additional cost of claiming the EIC is very low. [176]

Alstott refers to the pattern of errors as a trade off between participation and compliance.[177] The FSP chooses to have a high compliance rate at the cost of a low participation rate while the EIC has a high participation rate at the cost of a low compliance rate. Given that information is costly, a trade off between participation and compliance is probably inevitable.

Alstott takes the existing pattern for welfare programs (low participation, low overpayment) as desirable. We are not sure we would do the same. It is not at all obvious given the trade off, which pattern one would choose. As noted above, both the GAO and the USDA weight under and over-payments equally.

Although there is no general theory on how to balance over and under-payments, we can identify three factors. First, how we choose the balance may depend on which individuals either fail to receive payments in the case of under-payments and which individuals get the overpayments. For example, Liebman examines which individuals get EIC overpayments and finds that many EIC overpayments go to families who are quite similar to eligible families.[178] Ineligibility often is because the family fails one or more minor requirements rather than because overall income is too high. If so, we may not be concerned by over-payments.

Second, overpayments require higher tax rates, leading to excess burden. We would need to know the marginal cost of funds to determine the size of this effect. Finally, for any given belief about the trade-off, we must examine the cost of reaching the desired point. It

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[175]Additional explanations for participation rates are informational barriers and stigma. Supporting evidence is found, e.g., in R. Blank and P. Ruggles When Do Women Use AFDC & Food Stamps? The Dynamics of Eligibility vs. Participation, 31 Journal of Human Resources 57 (1996); Ponza et al., Mathematica Policy Research, Inc. (1999) (cited in note __); B.O. Daponte, S. Sanders, and L. Taylor Why Do Low-Income Households Do Not Use Food Stamps? Evidence from an Experiment, 34 Journal of Human Resources 612 (1999).

[176]See supra note __. Indeed, integration of other welfare programs would require higher compliance costs, as low-income non-filers will be required to file tax returns.

[177]Participation and compliance of EIC are extensively studied in Yin et al., 11 American Journal of Tax Policy 225 (1994) (cited in note __).

[178]Jeffrey B. Liebman, Who Are the Ineligible EITC Recipients?, 53 National Tax Journal 1165 (2000).

will generally be administratively cheaper to have more overpayments but full participation than to prevent overpayments at the cost of less participation. The reason is that it takes resources to prevent overpayments.

While the trade off of these factors may be complex, if we look at the actual numbers, the FSP pattern does not look attractive compared to the EIC pattern given almost any imaginable views on how to balance these factors. In particular, Janet Holtzblatt reports that if we add overpayments and administrative costs together, the EIC and food stamps both incur costs of about 25 cents on the dollar.[179] This means that as compared to the EIC (and by extension, integrating the FSP into the tax system), it costs the FSP a dollar of administrative costs to prevent a dollar of overpayments. This cannot be justified. For example, suppose that a welfare program has 100 truly eligible recipients who each receive $1 and that the tax system creates no administrative costs but has overpayments of 25 cents on the dollar while the FSP has 25 cents on the dollar of administrative costs and no overpayments. The cost of both the FSP and the tax system would be $125. It is hard to imagine that we would want to essentially throw away the $25 on administrative costs rather than transfer them to individuals.

Moreover, Holtzblatt's numbers may significantly understate the problem. She does not consider compliance costs, which means we spend more than a dollar to prevent a dollar of overpayments. Imagine the example above but now suppose the combined administrative and compliance costs for the FSP were, say, $140. Holtzblatt also does not consider the social costs of FSP under-provision due to non-participation. Adding these up, the costs of preventing overpayments for the FSP look exorbitant. Finally, factor in the data showing that overpayments under the EIC would go to families that are similar to eligible families. If overpayments under an integrated FSP were similar, there would seem to be no argument for the FSP pattern of errors. Therefore we can conclude that the pattern of errors for the EIC is preferable.[180] The error pattern argument supports integration.

3. In-kind Provision of Benefits

The FSP provides benefits in-kind through a voucher-type system. The government

[179]Holtzblat, Proceedings of the 93rd Annual Conference of the National Tax Association 116 (2000) (cited in note __).

[180]There could, of course, be intermediate solutions such as reducing the expenditures on compliance with the FSP. The USDA has actually taken steps toward simplifying FSP requirements. But these steps will inevitably undermine accuracy. See infra note ___ [timing discussion]

does not directly provide food to individuals on food stamps, unlike, say, school lunches.[181] Instead, the government provides individuals with coupons (typically in the form of an electronic card) which can be used only to purchase food at USDA certified establishments. Authorized retailers must fill out an application showing that they meet the requirements and personally go through a training session. Integrating the FSP into the tax system would probably involve eliminating the in-kind delivery (cashing out) because the tax system could not easily engage in this certification.[182]

The rationale for in-kind transfers has been subject to extensive study. For example, it has been suggested that in-kind transfers might help solve the good Samaritan Dilemma, although transfers of food (as opposed to insurance or durable goods) might not fit those models.[183]

Fortunately, we need not delve into that literature here. The reason why is that the typical food stamp benefit is less than the monthly food budget for most beneficiaries, and is only slightly restricted in its approved food items. In theory, therefore, cashing out should have no effect for these beneficiaries. The entire food stamp amount will be spent on food either way. This is in fact, close to true, although there are small and persistent deviations from prediction.[184] The reasons for this effect are not fully understood.

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[181] The National School Lunch Program provide subsidies to participating schools (and some additional commodities), which in turn provide meals to eligible students. However, eligible children receive from their school coupons (according to their eligibility status) that can be redeemed for provided meals. See Currie (forthcoming) (cited in note __) for additional details.

[182] An alternative solution would be through coordination. See infra note __ and accompanying text. [hybrid system discussion.]

[183] There is a large literature on in-kind provision of benefits. See, e.g., Timothy Besley and Stephen Coate, Public Provision of Private Goods and the Redistribution of Income, 81 American Economic Review 979 (1991); Charles Blackorby and David Donaldson, Cash versus Kind, Self-Selection and Efficient Transfers, 78 American Economic Review 691 (1988); Neil Bruce and Michael Waldman, Transfers in Kind: Why They Can Be Efficient and Nonpaternalistic, 81 American Economic Review 1345 (1991); Stephen Coate, Altruism, the Samaritan's Dilemma, and Government Transfer Policy, 85 American Economic Review 46 (1995); Stephen Coate, Stephen Johnson, and Richard Zeckhauser, Pecuniary Redistribution through In-Kind Programs, 55 Journal of Public Economics 19 (1994); Gahvari, F., In-Kind versus Cash Transfers in the Presence of Distortionary Taxation, 33 Economy Inquiry, 45 (1995); Albert L. Nicholas and Richard J. Zeckhauser, Targeting Transfers through Restrictions on Recipients, 72 American Economic Review, 372 (1982).

[184] Ohls and Beebout have found that approximately 11% of the caseload received food stamp benefits larger than their food budgets, suggesting a change in households' budget set due to food stamps. James C. Ohls and Harold Beebout, The Food Stamp Program: Design, Tradeoffs, Policy, and Impacts: A Mathematica Policy Research Study (1993). Yet, the percentage of constrained households (i.e. households with food stamp benefits greater than their need) found by Ohls and Beebout does not suffice to explain other empirical estimations. These studies have larger (although still relatively small) effects of in-kind provision on food consumption. For example, pre-1990 studies estimated the marginal propensities to spend on food (MPS) out of food stamps and out of cash income (that is, the amount spent on food out of an additional $1 of food stamp or cash income). Overall it is estimated that the

Although some may value the increase (if any) in food consumption due to in-kind provision, it is doubtful that any such benefit is worth the cost. If we measure nutritional outcomes as oppose to food intake, we cannot say, based on available evidence, that cashing out food stamps would have any effect on nutrition.[185] And it is nutrition not caloric intake that we should be concerned about with a food program. As noted in the Food Stamp Act of 1964 (establishing food stamps) food stamps are aimed at "*raising levels of nutrition* among low-income households" (emphasis added).[186]

Cashing out food stamps would also save administrative costs (separate from the savings from integrating food stamps into the tax system). An individual wanting to use the value of the food stamps benefit for something other than food has an incentive to sell them for cash. This means that the FSP must spend resources monitoring and enforcing the use of food stamps and individuals (and food retailers) will incur costs avoiding the food stamp police.[187] Some of the costs of enforcement have gone down in recent years with the switch to electronic benefits, which are harder to trade, but the problem is still significant.

MPS out of FS benefits centers around $0.25 whereas the MPS out of ordinary cash income in less than $0.15. See Thomas M. Fraker, Effects of Food Consumption: A Review of the Literature, Mathematica Policy Research (1990) and Currie (forthcoming) (cited in note __). Additionally, Rossi argues that overall various studies show reductions in food expenditures of about $0.18 to $0.28 for each dollar provided in the form of cash compared with conventional food stamps. Peter H. Rossi, Feeding the Poor: Assessing Federal Food Aid, p. 36 (1998). Rossi concludes, however that the main effect of food stamps is as an income transfer program. Id. at 5. Some researchers went so far as contending the disparity in the small percentage of constrained households and the estimation of MPS constitute a puzzle. See, e.g., Robert Breunig, Indraneel Dasguta, Craig Gundersen, and Prasanta Pattanaik, Explaining the Food Stamp Cash-Out Puzzle, USDA, FANRR-12 (2001). Nonetheless, Fraker provides a few reasons explaining why the estimated MPS out of ordinary cash income might be higher than an MPS out of food cash assistance, and hence the mentioned difference in estimated MPS is overestimated. Indeed, cash-out experiments and studies, that compare food stamps with cash assistance rather than with ordinary cash income, do not find any statistically significant difference between coupons and cash assistance. Currie discusses the cash out studies and concludes that they present no clear cut result. See discussion and references in Currie (forthcoming) (cited in note __). Moffitt reports: "What evidence there is on the cash-equivalent value of in-kind transfers suggest that Food Stamps are very nearly equivalent to cash . . ." See Robert A. Moffitt, Welfare Programs and Labor Supply, in Alan J. Auerbach and Martin Feldstein ed., Handbook of public economics vol.4, 2393, 2396 (2002).

[185] Currie (forthcoming) (cited in note __) surveys studies which attempted at measuring the nutrient effect of FSP. It turns out the evidence is mixed. Additionally, a couple of recent studies found a positive correlation between food stamp participation and being overweight or obese, in particular among women. See Marilyn S. Townsend, Janet Peerson, Bradley Love, Cheryl Achterberg, and Suzanne P. Murphy, Food Insecurity is Positively Related to Overweight in Women, 131 Journal of Nutrition, 1738 (2001) and Diane Gibson, Food Stamp Program Participation and Obesity: Estimation from the NLSY79, JCPR Working Paper no. 279 (2002)

[186] 7 U.S.C. section 2011.

[187] See, e.g., Note, Food Stamp Trafficking: Why Small Groceries Need Judicial Protection from the Department of Agriculture (And from Their Own Employees), 96 Mich. L. Rev. 2156 (1998) and Currie (forthcoming) for examples.

Finally, European welfare systems do not have specific food transfer programs.[188] There is no evidence that this lack of food transfer programs leads to systematic effects on food security or nutrition. Thus, if there are other good reasons for integrating food stamps into the tax system, the need to convert them to cash benefits should not be an obstacle.[189]

One argument against cashing out food stamps through integration with the tax system is that it would be too big a program change. Cashing out the FSP would be like eliminating it and increasing the EIC or TANF by a comparable amount. The argument of this paper is that we should compare institutional performance in meeting previously defined goals. The goal of food stamps might be improving nutrition among the very poor, in which case cashing out will have little effect. But the goal might be to provide food to the poor. It is not clear why providing food as opposed to improving nutrition should matter, but the integration decision must take as given the basic policy goals of the program and it is not inconceivable that providing food itself is the goal.[190] If so, integration should not change that decision.

Providing food is obviously not complementary to the services provided by the tax system, which is why we assumed that integrating food stamps into the tax system means cashing them out. If the FSP provided food itself rather than vouchers for food, integration with the tax system would probably be completely infeasible absent cashing the benefits out. For example, it is hard to imagine the tax system directly providing school lunches. But the FSP uses a voucher system combined with certification of food providers. This might be susceptible to a hybrid system in which the tax system provides credits or other benefits for expenditures on food at authorized establishments. A separate agency that has expertise in certifying and monitoring food providers (such as the USDA) could perform the certification

[188] Moffitt, Handbook of Public Economics vol.4, 2393, 2396 (2002) (cited in note __).

[189] There may be political reasons why in kind provision is important. For example, food stamps might very well be an agricultural subsidy as much as a nutritional subsidy. Analysis of food stamps as an agricultural subsidy or whether agricultural subsidies should be integrated with the tax system can be analyzed under the framework presented in this paper but analysis of the particular details of these issues is beyond the scope of this paper.

Cashing out food stamps would also eliminate food stamp trading. Note, 96 Mich. L. Rev. 2156 (cited in note __).

[190] One reason why is that providing food can serve the dual purpose of reducing hunger and subsidizing farms.

function.[191] The Hope and Lifetime Learning tax credits, for example, work exactly this way.[192]

Such a hybrid system may not be easy to implement. Individuals would have to keep receipts to prove their expenditures, fraud would be common, and coordinating between the IRS and the other agency might be difficult.[193] Nevertheless, given the enormous costs of implementing food stamps as is, such a change may be beneficial even if it is expensive.

In sum, if the FSP were to be integrated into the tax system, cashing out food stamps would be the easiest course. The tax system could much more easily provide cash benefits than in-kind benefits – it specializes in measuring income and collecting or disbursing cash. Cashing out food stamps would probably not reduce the nutritional benefits of the program and would reduce or eliminate enforcement of the in-kind limits. If food stamps cannot be cashed out, integration may still make sense through a hybrid-type system, but would have many fewer benefits.

4. Measurement Periods and Responsiveness

Responsiveness is by far the most difficult problem with integrating FSP with the tax system, and we think that it explains why food stamps are not and maybe should not be integrated into the tax system. The problem is that food stamps are provided on a monthly basis and eligibility is determined on a similar time scale, while the tax system operates on a yearly accounting period. Alstott describes this difference as a trade off between responding immediately to short-term changes in need and waiting to evaluate the permanency of the

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[191] A few plans for a coordinated tax and USDA systems providing nutrition tax credits have been suggested. See Harold Beebout and Michael E. Fishman, Supports for Working Poor Families: A New Approach, The Lewin Group and Mathematica Policy Research, Inc., (2001) http://www.mathematica-mpr.com/PDFs/supportpoor.pdf. The practicality of the specific proposals may be in question but the general notion of using non-tax agencies for certification (or regulation) of specialized issues is not strange to the operation of the tax system.

[192] These credits are available for tuition only at educational institutions described in section 481 of the Higher Education Act of 1965 and which are eligible to participate in a program under title IV of that act. See IRC 25A(f)(2). See supra note __ [education programs, section 1]

[193] Indeed, a hybrid system resembles a U-form mechanism, and the organizational literature teaches us that coordination among divisions is costly. The viability of coordination depends on the extent of interdependency and communication required among divisions. Certification, for example, where applicable, seems to be a rather workable coordination scheme as it requires very limited communication. Other coordination schemes may prove more complicated. For example, the Low Income Housing Tax Credit (LIHTC) works through a hybrid mechanism. Under the LIHTC, the tax system provides tax credits to developers of housing for low-income families, and the task of monitoring developers is carried out by non-tax state agencies. The GAO reported recently of coordination problems between the IRS and state agencies. See GAO, Tax Credits: Opportunities to Improve Oversight of the Low-Income Housing Program, GAO/GGD/RCED-97-55 (1997).

changes.[194] Welfare systems such as the FSP tend to respond to short-term changes, acting in some ways as insurance, while the tax system tends to try to measure longer-term changes in well being.

Responsiveness can be very important to a welfare system. If an individual or family has a short-term but severe drop in income, they can lose housing, go hungry, or otherwise go without basic needs. The effects can be large even if the drop in income is only short term. In theory, if the drop is only short term, capital markets (and insurance) could help smooth consumption, but in practice, capital and insurance markets are highly imperfect. Moreover, if the immediate crisis turns out to be a permanent change, capital markets may not be able to help even if responding immediately to the permanent change may be vital. Responsiveness is an important function for welfare systems.

The tax system does not value fast responses to changes in well being. The tax system redistributes income from the wealthy to the poor, thereby increasing the welfare of the poor. In this sense, it is complementary to welfare systems. But the tax system does not generally attempt to provide emergency assistance.[195] Instead, as Alstott says, the tax system tries to measure permanency of changes in well being.[196] In fact, the one year accounting period is arguably too short to measure long-term well being, and scholars have proposed averaging systems that remedy this shortfall.[197]

Integrating food stamps into the tax system, therefore, might mean that it would not be able to be responsive to short-term needs, seriously undermining its performance. To understand this problem, we explore three issues. First, we try to assess how important a role responsiveness plays in the FSP. We would like to know whether reducing the responsiveness of the FSP would be a significant problem by itself. Second, we would like to know whether there are good substitutes for the short-term needs fulfilled by food stamps, so that there need be few social losses if FSP no longer serves this role. Third, we would like to understand how responsive the FSP could be if it were integrated into the tax system.

a. Emergency response appears to be moderately important to FSP although not central.

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[194] The issue of responsiveness has been addressed in the 60's and 70's by the NIT literature. See, e.g., Michael R. Asimow and William A. Klein, The Negative Income Tax: Accounting Problems and a Proposed Solution, 8 Harvard Journal on Legislation 1 (1970) (cited in note __).

[195] There are emergency relief provisions in the tax code, such as filing extensions for presidentially declared disaster areas, but they are relatively minor. See IRC section 7508A.

[196] Additionally, the tax system applies a specific timing pattern which may not correspond specific needs in a timely fashion. For example, education assistance programs follow an academic rather than fiscal schedule.

[197] See William S. Vickrey, Agenda for Progressive Taxation (New York 1947).

Responsiveness is built into the design of the FSP. The law provides that households are entitled to apply for food stamps on the first day they contact a food stamp office during business hours.[198] States must provide eligible applicants with food stamps as soon as possible but no later than 30 calendar days following the date the application was filed.[199] In addition, households that have very little income or liquid resources can apply for expedited food stamps. If eligible, an applicant must receive them no later than seven days after the date of application.[200]

There have been lawsuits about whether states are meeting these requirements.[201] These suits may merely represent transfers – individuals might sue to speed up the process because sooner is better. But they may also represent real need created by delays in processing. For example, scholars have found that about two-thirds of all people entering the FSP have experienced a 20 percent drop in income in the prior four months.[202] In reality, the suits probably represent some balance between the two and indicate that a significant concern in program design was getting food stamps to needy individuals quickly.

Another indication of responsiveness is the length of spells on food stamps. If individuals or families generally have short spells, it would indicate that the system must be responsive – the system would be helping with short term needs and failing to be responsive would defeat that purpose. If, on the other hand, spells are long, the tax system might be able to help because the program would be responding to more permanent changes in well-being.

The data on spells is mixed. Gleason, Schochet and Moffitt have done the most extensive study of food stamp spells.[203] They estimate two samples - one of people who begin a spell of FSP participation during a given calender period ('entrants'), and the other of all food stamp pariticpants at a given point in time, regardless of when they began receiving food stamps (i.e. cross-sectional). They report that most entrants exit fairly quickly, with the median participation period about nine months. Furthermore, fewer than one-third of entrants remain on food stamps for two or more years. Nevertheless, the cross-sectional sample shows

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[198]See 7 U.S.C. 2020(e)(B)(iii).

[199]See 7 U.S.C. 2020(e)(3); 7 C.F.R. 273.2(g).

[200]See 7 U.S.C. 2020(e)(9); 7 C.F.R. 273.2(i).

[201]See, e.g., Reynolds v. Guiliani, 35 F.Supp.2d 331 (S.D.N.Y. 1999).

[202]Philip Gleason, Peter Schochet, and Robert Moffitt, The Dynamics of Food Stamps Participation in the Early 1990s, Mathematica Policy Research, Inc. (1998) http://www.fns.usda.gov/oane/MENU/Published/FSP/FILES/Participation/DYNAMICS.PDF

[203]Gleason et al., Mathematica Policy Research, Inc. (1998) (cited in note __).

that at any given time, individuals on food stamps are likely to have long spells.[204] These two samples may lead to the conclusion that a certain group of FSP recipients go on and off the program repeatedly. Indeed, they estimate that two-thirds of all FSP entrants are repeat entrants, and that many reenter rather quickly after they have exit the program.[205] Accordingly, if short food stamp spells by individuals who go on and off food stamps are aggregated, the vast majority of spells are relatively long term.[206]

An earlier study by Blank and Ruggles has similar findings. They find that much food stamp participation occurs during long spells of eligibility.[207] They find that while there are a relatively large number of short *eligibility* spells for food stamps, most of these spells open and close without program *participation.* In essence, they find that there are two groups among those eligible for food stamps: "a relatively disadvantaged group with low future income expectations who enroll in public assistance immediately and another less disadvantaged group who (largely correctly) predict future income increases and who do not seek benefits."[208] This suggests that food stamps serve longer term needs that might be served by the tax system.

One might be tempted to conclude from this data that responsiveness is not important to food stamps. But Blank and Ruggles report that those who take up food stamps do so almost immediately upon eligibility. The tax system, even if able to handle these individual's long-term needs, might not be able to respond quickly when the individuals first become needy.

If the primary concern is quick responses to long-term needs, we need to understand the immediate cause of the problem and the type of population it effects. For example, it is important to know the source of the 20% reduction in income that often triggers a food stamp application. Only 27% of food stamp participants earn income; the rest have other types of

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[204] More than three-quarters of FS participant (in the cross-sectional sample) have spells longer than two years. Gleason et al., Mathematica Policy Research, Inc. (1998) (cited in note __).

[205] Nearly half of those who reenter the program do so within the first four months after exiting.

[206] For example, within the panel period (of 32 months) they found that about half of participants had multiple spells, about 42% had a single spell that lasted more than two years, and less than 3% had a single spell that lasted less than eight months. Note additionally that the FSP structure (i.e. high responsiveness) may encourage beneficiaries to go on and off the program. See, e.g., Moffitt, Handbook of Public Economics vol.4, 2393 (2002). An annual measurement system may prevent such strategic behavior by welfare recipients.

[207] Rebecca Blank and Patricia Ruggles, When do Women Use Aid to Families with Dependent Children and Food Stamps? The Dynamics of Eligibility versus Participation, 31 Journal of Human Resources 57 (1996).

[208] Blank and Ruggles, at 59 (1996).

income such as SSI (31.7%), TANF (25.8%), and Social Security (25.5%).[209] If, for example, the reduction in income is mainly among income earners, an increases in the size or length of unemployment insurance may be the appropriate short-term response. The little evidence we have found suggests that though only 27% of FSP participants earn income, a decrease in earned income is the most probable trigger for entery.[210]

In addition, retaining the entire food stamp program to solve the immediate needs of a small portion of the population on food stamps may not be desirable. The USDA reports that of 7,335 surveyed households receiving food stamps in 2000, 401 were entrants.[211] This means that responsiveness during the year is important only to about 5.5% of beneficiaries. In addition, in the fiscal year 2000 only 6.2% of food stamp recipients used the expedited food stamps option, and about 30% of them were new entrants.[212] We may be better off responding to these emergencies in a different way if the benefits from integrating food stamps with the tax system are otherwise large.

We would like to have more data before claiming that responsiveness is central to food stamps. For example, we would like further study of the length of food stamps spells. Additionally, we would like to understand better the reasons households go on food stamps and what resources they have that could help respond to short-term need.[213]

b. Other programs as currently constituted, could not adequately replace food stamps.

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[209]See USDA, Food and Nutrition Service, Nutrition and Evaluation, Characteristics of Food Stamp Households: Fiscal Year 2000, Report No. FSP-01-CHAR Table A-1 (2001).

[210]Gleason et al. examine a few possible triggers to FSP entry. They define an income decrease as 20% decrease in household income from one month to the next during a window period of 4 months preceding entry. About 40% of entry during the sample period was triggered by a decrease in eared income only. Another 18% was triggered by a decrease in income and changes in household structure (though no separation between earned and non-earned income was applied here). About 27% of entry did not account to any trigger event in this study. Gleason et al., Mathematica Policy Research, Inc. (1998) (cited in note __).

[211]USDA, Food and Nutrition Service, Nutrition and Evaluation, Characteristics of Food Stamp Households: Fiscal Year 2000, Report No. FSP-01-CHAR Table A-16 (2001).

[212]See USDA, Characteristics of Food Stamp Households: Fiscal Year 2000, Food and Nutrition Service, Report No. FSP-01-CHAR, Table A-16(2001).

[213]USDA regularly studies the profiles of individuals who are on food stamps but these studies do not include the events that precipitated the need for food stamps. E.g. Id. In addition, studies show that food stamps usage rises and falls with the economy, so we can guess that unemployment and reduced wages are central to the use of food stamps. *cites.* Nevertheless, we do not know of studies that give more detail on the events that precipitate food stamps usage.

There is a large system in the US designed to respond to short-term dire food needs known as the Emergency Food Assistance System (EFAS).[214] EFAS consists largely of food kitchens and food pantries (and their wholesale suppliers). Individuals in need can obtain food from either of these sources.[215] The EFAS, however, is only about one fifth the size of the FSP and is not as well targeted.[216] Moreover, EFAS is not equipped to handle the mid-term problems – the individual who needs more than a few nights of assistance but less than several years – which the FSP handles well. The EFAS could be expanded and modified to some extent were food stamps integrated into the tax system, but this would effectively mean less than full integration because some of the functions of food stamps would be transferred to the emergency food programs.

There might be non-food related responses to short-term need. That is, as noted above, cashing out the program may not present serious difficulties and, if this is correct, responsiveness needs may be met through quick cash assistance rather than through quick food assistance. Determining that responsiveness is essential to the FSP would then mean determining that existing cash programs (combined with the EFAS) could not meet these needs.[217]

c. The tax system could not easily be made responsive to short-term food needs.

We can divide tax system responsiveness into two pieces – the measurement period and the period in which benefits are provided. These can vary. For example, benefits can be provided every month even if eligibility measurements are made only once a year.

The tax system probably could not provide short measurement periods. As noted, it is important for the tax system to use long measurement periods. Reducing the measurement periods in the tax system to allow integration of the FSP and other transfer programs would

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[214]See, e.g., James Ohls and Fazana Saleem-Ismail, The Emergency Food Assistance System - Findings from the Provider Survey, Volume 1: Executive Summary, USDA, Economic Research Service (2002).

[215]We understand that state food stamps offices often direct individuals to food pantries while they await food stamps, indicating that the EFAS responds to very short-term needs while food stamps deals with longer periods of need.

[216]James Ohls, Fazana Saleem-Ismail, Rhoda Cohen, and Brenda Cox, The Emergency Food Assistance System - Findings from the Provider Survey, Volume II: Final Report, USDA, Economic Research Service, Ch. 8 (2002)

[217]Put differently, because responsiveness is costly, the government should prefer a lesser number of responsive systems (and maybe only one). Although we would need to study the issue further, the combination of FSP, SSI, TANF, Social Security, General Assistance, and unemployment insurance, for example, may represent too many systems to the extent they apply to identical recipients.

impose costs on everyone because shorter periods would require more frequent filings. This would be prohibitively costly.

It is not clear how important short measurement periods are. Short measurement periods, even if otherwise desirable, increase administrative and compliance costs. To the extent short measurement periods increase compliance costs, they reduce participation in the program. Thus, short measurement periods may increase responsiveness for some at the cost of completely eliminating benefits for others.

In fact, because of the difficulties of this balance between responsiveness and long-term measurement and because of the high administrative costs of short measurement periods, the FSP has been moving toward longer measurement periods.[218] Currently, frequency of measurement varies across states and can be quarterly, semiannually, annually, and in some cases, bi-annually.[219] Thus, shifting to annual measurement for food stamps would be consistent with the trend of the program.

Monthly provision of benefits is a more difficult problem. It is not inconceivable that the tax system provide monthly benefits. The EIC is currently available on this basis under the "advance EIC."[220] The EIC program, however, has a natural intermediary between the IRS and the needy individual, the employer. The individual certifies to her employer that she expects to be eligible for the EIC and receives installment payments of the credit each pay period. The employer advances funds to the individual and receives a credit on its tax return, effectively acting as a financial intermediary.[221] The FSP, however, has no similar intermediary because individuals need not be employed to receive food stamps.[222]

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[218]See GAO-01-272 (cited in note __) and Rosenbaum, Center on Budget and Policy Priorities (2000) (cited in note __).

[219]Households in which all adults are elderly or disabled are allowed 24-month certification periods. Other households may not exceed 12 months certification periods. See Rosenbaum, Center on Budget and Policy Priorities (2000). For example, the average certification period among all food stamp households in FY 2000 was 9.6 months. See USDA, Food and Nutrition Service, Nutrition and Evaluation, Characteristics of Food Stamp Households: Fiscal Year 2000, Report No. FSP-01-CHAR Table A-2 (2001). Yet, additional reporting requirements sometimes apply within the certification period.

[220]See IRC section 3507.

[221]The employer is held harmless as he reduces payroll tax remittances to the government.

[222]Notice, however, that recent developments in the U.S. welfare system has provided greater emphasis to work-related incentives. Blank and Ellwood report that federal funds available to support working low-income families increased from $11 billion in 1988 to $66.7 billion in 1999, whereas cash welfare support to (largely non-working) families headed by non-elderly, non-disabled adults fell from $24 billion in 1988 to $13 billion by 1999. See Rebecca M. Blank and David T. Ellwood, The Clinton Legacy for America's Poor, in Jeffrey A. Frankel and Peter R. Orszag eds., American Economic Policy in the 1990s 749 (Cambridge 2002).

Conceivable banks or other financial institutions could fulfill this role, but this would probably require significant monitoring, potentially defeating the benefits of integration.[223]

Moreover, the advance EIC, even though easier to imagine than an advance food credit type system, has not worked. The take up rates for the advance EIC are extremely low. Only 1.1% of EIC recipients used the advanced payment option in 1998.[224] We suspect that a similar system for food stamps would be even less successful.[225]

d. Conclusion on responsiveness

Combining these considerations, we conclude that the tax system could not be adequately responsive to the needs that the FSP program fulfills. In particular, to the extent immediate response is necessary even for individuals with medium to long-term needs, the tax system may be inadequate. Becoming more responsive would sacrifice too many goals of the tax system and not becoming more responsive would sacrifice too many goals of the food stamps program.

Nevertheless, we think the issue should be analyzed further. The data on the need for quick responses by the FSP are mixed and we do not yet know exactly how important it is. Moreover, we do not know whether other elements of the transfer system could, if enhanced, satisfy this need while allowing us to realize the benefits of integration.

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[223] Still, a few scholars suggest that other mechanisms might be employed to mitigate the tax system's lack of responsiveness. For example, using providers of goods or services as intermediaries. See Graetz and Mashsaw, True Security, at 303 (1999) (cited in note __) and Sammartino, Toder, Maag, Providing Federal Assistance for Low-Income Families through the Tax System: A Primer, at 44-5 (2002) (cited in note __).

[224] Reported by Hotz and Scholz (forthcoming) (cited in note __). Similar percentage is found in other fiscal years. A few explanations have been suggested to recipients' decline of the advanced payment option – see U.S. General Accounting Office, Earned Income Tax Credit: Advance Payment Option is not Widely Known or Understood by the Public, GAO/GGD-92-26 (1992) and Smeeding et al., 53 National Tax Journal 1187, 1189-90 (2000) (cited in note __). Behavioral or psychological factors may also affect recipients' choices. There have been studies that recommend improvements to the advance EIC. See, e.g., Yin et al., 11 American Journal of Tax Policy 225 (1994) (cited in note __). Changing the legal default rule, for example, in a way that obliges employers to participate in advanced EITC unless asked not to by the employee may generate a much higher participation level.

Yet, the failed attempt does not necessarily prove that tax assistance cannot be provided on a non-annual basis. For instance, the Working Families Tax Credit, an EITC-like program in the United Kingdom, is distributed incrementally during the year through employers. See Janet Hotzblatt and Jeffrey B. Liebman, The Earned Income Tax Credit Abroad: Implications of the British Working Families Tax Credit for Pay-As-You-Earn Administration, Proceedings of the 91st Annual Conference of the National Tax Association 198 (1998).

[225] One way to look at the problem is that an advance payment system requires a prospective determination of whether an individual is eligible. The tax system traditionally works retrospectively – individuals total up their taxable income after then end of the tax year. The advance EIC is retrospective but only on a monthly basis, which is not too far away from a prospective system.

4. Conclusion

There would be many benefits to integrating the FSP into the tax system. The two programs have strong complementarities. It is especially evident in the program's measures of accuracy and complexity. A crude measure of accuracy reveals (at the minimum) no difference between FSP and EIC whereas the former is about ten times more complex. Nevertheless, if short-term hunger is an important enough goal of the FSP, integration is probably not desirable. A similar tax program could not fill this need.

C. *The Earned Income Credit*

The analysis of the EIC is very similar to the analysis of food stamps. The main differences are (i) that the EIC is a cash rather than in-kind program so concerns about providing cash benefits are eliminated, and (ii) that responsiveness is less important for the EIC than for food stamps. Therefore, we conclude, integration of the EIC and the tax system, as under current law, makes sense.

We need say very little about the benefits of integration of the EIC with the tax system. As noted, measurements for income transfer programs will be closely related to measurements for the tax system and coordination among income transfer and tax programs is important.

We also need say little about the problem of the use of different measurement criteria. Alstott argues that ideally, a separate transfer program might use different (more accurate) measurement criteria than an integrated program. The arguments on this issue are essentially the same as they were for the issue with respect to food stamps. Finally, we need say little about the trade-off between participation and compliance – once again, the trade offs are similar to those for food stamps. However, the empirical configuration of the trade-off might be different than that presented in the comparison of EIC and FSP.[226]

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[226]See supra notes ___ and accompanying text. [empirical error results.]

The EIC error pattern may not serve as an ideal illustration of the tax system's accuracy capability. McCubbin, using IRS's 1994 compliance study, finds that income reporting does not constitute a significant problem in EIC noncompliance. McCubbin, EITC Noncompliance: The Determinants of the Misreporting of Children, 53 National Tax Journal 1135 (2000) (cited in note __). According to McCubbin, the major area of noncompliance - over 70% of overpayment errors - had to do with 'qualifying child' errors. The 'qualifying child' definition is complicated and difficult to measure and enforce. Similar findings of the 'qualifying child' significant errors are reported by the IRS. See IRS (1997, 1999) (cited in note __). The IRS has taken since a few steps to improve its management of the 'qualifying child' feature that may improve its administrability in the future. For description of these steps, see Hotz and Scholz (forthcoming). In addition, Holtzblatt and McCubbin (2002) (cited in note __) suggest unifying the EIC dependency standard with the definition of a 'dependent', which will simplify the EIC. McCubbin estimates that it will not cause a significant change to accuracy. McCubbin, 53 National Tax Journal 1135 (2000) (cited in note __). Furthermore, the 'qualifying child' requirement is much more stringent (and accordingly

The key difference between the EIC and the FSP, in our view, is the need for responsiveness in each program. We argued that if responsiveness is important for the FSP, integrating that program into the tax system would mean a sufficient sacrifice in responsiveness that integration was not desirable. We believe the responsiveness is not as important for the EIC and, therefore, integration of the EIC into the tax system makes sense.[236]

The core reasons we believe this to be true is that the EIC is a wage supplement. Individuals are entitled to the EIC based on their wage income. It provides a supplement only to the working poor, and non-working individuals are not eligible. This is in contrast to food stamps in which eligibility is not based at all on working.[237] It is also in contrast to work requirements for TANF or other transfer programs, where individuals who do not work remain eligible subject to incentives in the system to obtain work.[238]

As a wage supplement, the EIC is not designed to be and cannot be responsive to individuals in dire need. It cannot help individuals who have lost their jobs, who cannot find work, or otherwise need help immediately. Moreover, as a wage supplement, it is not designed to *temporary*. Low wage workers may remain that way for long periods of time,

more accurate and complex) than the dependency requirement for FSP. The common application for food stamps only asks for the list of individuals living together in a single dwelling. See, e.g., the food stamps application of Indiana (cited in note __). See, e.g., Holtzblatt and McCubbin (2002) (cited in note __) for a description of EIC's 'qualifying child' requirements.

[236]Hotz and Scholz (forthcoming) (cited in note __) estimate the value of the difference between annual and monthly EITC payments, and show that it may not be very large for taxpayers. Hence, the lack of responsiveness - i.e. the failure of the advanced EITC initiative - does not necessarily harm EITC accuracy significantly.

[237]There are some negligible work requirement for food stamps.

[238]Work requirements in welfare program (i.e. the separation of those who can work from those who cannot) are an additional feature of regulating individuals' behavior. The advantage of work requirements is better targeting of the needy. See, e.g., George Akerlof, The Economics of 'Tagging' as Applied to the Optimal Income Tax, Welfare Programs, and Manpower Planning, 68 American Economic Review 8 (1978); Albert L. Nichols and Richard J. Zeckhauser, Targeting Transfers through Restrictions on Recipients, 72 American Economic Review, 372 (1982); Timothy Besley and Stephen Coate, The Design of Income Maintenance Programmes 62 Review of Economic Studies, 187 (1995). Yet, there are a few problems with regulating work such as the broad use of welfare workers' discretion, violation of horizontal equity, and complexity. See, e.g., Aaron, Alternative Ways to Increase Work Effort under Income Maintenance Systems, (1975) (cited in note __). The choice between work requirements (e.g. TANF) and work incentives (e.g. EIC) ultimately falls back on issues of potential accuracy and induced complexity. We do not dwell into this subject here. For a recent survey of 'workfare' policies and their effectiveness, see Rebecca M. Blank, Evaluating Welfare Reform in the United States, 40 Journal of Economic Literature 1105 (2002).

unlike, one hopes, individuals who need emergency assistance. To this end, the EIC has no time cut-off, unlike TANF.[239]

There is also evidence that the EIC functions well as an annual payment. Several studies indicate that individuals use the EIC as a form of forced savings and tend to invest the lump sum payments in ways that they would have been unlikely to invest monthly payments. For example, Romich and Weisner find that families are more likely to purchase durable goods and make large purchases with the EIC than with other funds.[240] Other studies have found that the lump sum EIC allows recipients an opportunity to make desirable changes in economic behavior.[241]

As with food stamps, we would like to have more information before drawing conclusions about the need for responsiveness in the program. For example, we have been unable to find any information about EIC spells comparable to the evidence on food stamp spells. We also cannot conclude from the fact that the EIC is non-responsive now that it would not ideally be responsive. What we observe may be an artifact of the fact that it is integrated into the tax system and have little to do with its ideal structure.

More important, the whole notion of responsiveness of a given program is dependent on other programs. For example, the EIC might be able to be a non-responsive wage subsidy only because other programs like food stamps or TANF are responsive. The arguments we have made are based on the existing programs rather than on a theory of which programs or how many programs should be responsive to short-term needs.

Nevertheless, with the basic framework of existing programs, integration of the EIC makes sense. Other programs can act to reduce emergency needs allowing the EIC to be structured as a wage subsidy.

D. *Summary and Comments on Relationship to Overall Reform*

The arguments on integrating the FSP and the EIC into the tax system depend on specialization and coordination. There are strong reasons why integration makes sense given

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[239]Food stamps also have no time cut-off. The reason appears to be that some individuals, mostly the elderly, remain on food stamps for long periods of time. See discussion, note _ infra and text for a discussion of why food stamps need to be responsive. For a discussion of time cut-off policies see Robert A. Moffitt and LaDonna Pavetti, Time Limits, JCPR Working Paper No. 91 (1999).

[240]Jennifer Romich and Thomas Weisner, How Families View and Use the EITC: Advance Payment versus Lump Sum Delivery, 53 National Tax Journal 1245 (2000).

[241]Smeeding et al., 53 National Tax Journal 1187 (2000) (cited in note __). See also, Lisa Barrow and Leslie McGranahan, The Effects of the Earned Income Credit on the Seasonality of Household Expenditures, 53 National Tax Journal 1211 (2000).

the specialization of the tax system in measuring the relevant attributes and disbursing funds and given the benefits of coordination. A first approximation of accuracy and complexity of the FSP and EIC supports this argument. Nevertheless, some elements of transfer programs could not easily be implemented by the IRS – the costs savings from tax system implementation would not be worth the reduced accuracy. In particular, the tax system is not designed to be able to respond quickly to changes in well-being and some sort of transfer system is likely necessary to do this. To the extent food stamps are a necessary component of a quick response system, integration is not desirable.[242]

More generally, we have tried to show how the integration decision depends on the trade-off between coordination and specialization. Integrating most or all welfare programs into the tax system, such as through a negative income tax, is attractive because the tax and transfer systems rely on similar variables and coordination among tax and transfer programs is important. For example, one can imagine a broad system of refundable tax credits (or a negative income tax of another sort) combined with an emergency welfare system designed to reduce short term needs.[243] Such a system might be able to take advantage of the benefits of tax system-based delivery of funds with responsiveness to short-term needs.[244]

There may be problems with integration because many elements of the transfer system could not be well replicated within the tax system without a significant loss of specialization. For food stamps, the problems were the provision of in-kind benefits and rapid response. Study of other elements of the transfer system may reveal similar problems. One problem we can foresee is that the tax system may not have the expertise to exercise significant discretion regarding many problems of transfer system. That is, a program that requires field agents to make non-income based decisions about eligibility may not be ideally suited for integration. For example, a program might provide housing benefits for families provided that the children make good faith efforts to attend school. If the decision on whether the children have met this requirement involves discretion, integration into the tax system would be a bad idea.

Although the balance in any particular area would depend on the facts, integration may be worthwhile notwithstanding these problems. The benefits of specialized measurement

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[242]If responsiveness is indeed the only relevant obstacle for integration, this paper proposes a crude measure for its necessary value - i.e. the marginal complexity costs saved through integration.

[243]A few general proposals from the 60's and 70's can provide similar examples - e.g. Guaranteed Annual Income programs, the NIT, Nixon's Family Assistance Plan. See, e.g., Dennis Ventry, The Collision of Tax and Welfare Politics: The Political History of the Earned Income Tax Credit, 1969-99, 53 National Tax Journal 983 (2000).

[244]Obviously the tax system is a good candidate for integration, but integration of transfer programs into a single non-tax welfare agency is another plausible institutional candidate under this framework. The advantages and disadvantages of a non-tax welfare agency follow from the analysis in this paper.

and coordination may be greater than the costs. As noted in the comparison of food stamps and the EIC, there may be enormous savings from integration.

V. Conclusion

Rather than summarize what has already been said, let us suggest further avenues for research. First, as noted, we would like to extend the institutional framework to include agency costs and public choice concerns. The departmentalization framework gives us some valuable intuitions but many of these intuitions may change once agency costs and public concerns are incorporated.

We suspect, for example, that agency costs might explain some of the structure of government better than team theories of organizations. In particular, tax expenditures tend to be redundant in the sense that they grant to the Internal Revenue Service authority to implement a program that is within the expertise of another agency and often has close substitutes at the other agency. An departmentalization rationale cannot make sense of this pattern. An agency cost analysis, however, might. The idea would be that having multiple agents perform similar tasks allows Congress or the President to better monitor each and to have the ability to threaten each with removal of the program. This might improve performance notwithstanding that specialization and coordination costs go up. Further research is needed in this area.

Second, we would like to see many more examples analyzed. This paper used the EIC and food stamps as its primary examples. Transfer systems, however, provide a natural case for integration, and analysis of other programs may be more difficult. For example, there are numerous education, health care, and housing subsidies in current law and analysis of these provisions would be useful both for understanding the merits of the particular provisions and also for developing intuitions about the tax expenditure problem more generally.[245] In addition, we would like to understand better the mechanisms used to coordinate policy in these areas and also in the private sector.

Third, nothing in the analysis limits its application to taxation. The same analysis might apply, for example, to determine whether antitrust policy is best implemented in the Justice Department or the Federal Trade Commission, or both. Similarly, the analysis might help determine whether environmental policy should be implemented through the Environmental Protection Agency, the Department of the Interior, the Army Corp of Engineers, other agencies, or some combination. Understanding how the analysis applies in these other settings might help in understanding the tax setting and might also yield interesting insights in those areas.

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[245] For example, this paper's framework can be used to analyze potential proposals to consolidate similar tax expenditures such as the different tax transfer for education expenses.

Finally, the purpose of this paper was to understand the proper scope of the "tax system." The analysis can go in the other direction. Perhaps some tax collection functions are best carried out by other agencies. For example, an agency with specialization in farmers might best collect taxes that are particular to farmers. Many countries have more than one tax collection agency[246] and the analysis presented here might be helpful in explaining this.

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[246] England and Israel, for example, both use separate agencies to collect their VATs and their income taxes. Cite.

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